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THE "C. & D." SUMMER ISSUE

is well known at home and abroad as the highest achievement in journalistic enterprise. The contents are always exceptionally valuable to business men in pharmacy and the drug trade, while they equally appeal to the artistic sense, and to the tastes of those who have regard for the practice of pharmacy and the allied branches of science and technology. The Summer Issue for 1908 will be published in the week ending

Saturday, July 25.

The character of the issue enables the Publisher to stitch in it price-lists and circulars as insets. The economy of this method of distributing such advertising material to buyers is admitted, and experience has proved its value as a business-bringer. The Publisher has an artistic booklet about the matter which he will be glad to send to advertisers on application to the head office, and he desires to impress upon all interested the necessity for early decision.

Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first column.

ADULTERATED GENTIAN POWDER is still on the market, but the diluent is new (p. 901).

EXPORT AND IMPORT TRADE is still bad, according to the Board of Trade returns (p. 900).

THE JAPANESE are now producing good calomel. Notes on the subject will be found on p. 905.

WE CONTINUE our selections from the "Canadian Formulary," p. 906 being devoted to liquors, powders, spirits, and syrups.

A FEW PARTICULARS about the forthcoming meeting of the British Pharmaceutical Conference in Aberdeen are given on p. 899.

THE QUEENSLAND conditions for labelling proprietary disinfectants are given on p. 888. Exporters and manufacturers please note.

SOME ALTERATIONS have been made in the regulations for the Preliminary examination of the Pharmaceutical Society of Ireland (p. 895).

THE BUSINESS of C. J. Hewlett & Son has been converted into a limited company (chiefly for family reasons) with a capital of 70,000*l.* (p. 892).

"RHINITIS TABLETS (DR. LINCOLN)" is now admitted by the Board of Inland Revenue to be an exempt title for the reasons given in an Editorial Note on p. 898.

THE PRESCRIPTION PROBLEM given in our issue of May 30 proved too much for all competitors. The solution is given on p. 909 along with a New South Wales "scrip."

SIR JAMES DEWAR, F.R.S., lecturing on the nadir of temperature (15° absolute), gave reasons why this cannot be lowered for the present. A large supply of helium must first be obtained (p. 902).

SOME INTERESTING NOTES on materia medica are given on pp. 900 and 901. These refer to the anti-opium plant (*Combretum sundaicum*), Biak, an opium substitute, and the collection of asafetida.

THE PRELIMINARY EXAMINATION required of chemists' apprentices in Cape Colony was discussed at a meeting of the Pharmaceutical Society in Cape Town last month, and recommendations for its improvement were adopted (p. 890).

IN VIEW of the increasing importance of trade with Japan the observations by Mr. Ernest O. James, an English Pharmacist in Japan, on the imports of chemicals, drugs, and medicinal preparations are of value to exporters. This article is printed on pp. 903-905.

THE FEATURES in a broken week on the markets include an advance in opium and shellac. Hyposulphite of soda, aconite, stavesacre, and Japan wax are firmer. Ammonia sulphate, cream of tartar, and carnauba wax are easier. Soda tart. and pulv. seidlitz are lower (p. 911).

IN CONNECTION with the revision of the British Pharmacopoeia Mr. T. F. Harvey, Ph.C., F.C.S., communicates a series of notes on the report of the Committee of Reference. He deals with the examination of commercial samples or the production of official substances in the light of B.P. and other tests (p. 904).

AT THE LAST MEETING of the Chemical Society the communication of chief interest to pharmacists was on new arsenic compounds which have been prepared at the Wellcome Chemical Works for the purpose of replacing atoxyl in sleeping-sickness. The compounds promise to be of greater value in syphilis (p. 908).

"XRAYSER," writing on the Joint Committee's report and the resurrection of the directorate clause by Sir John Batty Tuke, points out that the Pharmaceutical Council (Great Britain) no longer want it (p. 897). At a Co-operative Congress in Newport (Mon.) this week the subject was mentioned and a resolution passed condemning the qualified director principle as unnecessary for co-operative societies and limited companies (p. 886). It is desirable that chemists should not consider the proposal to be dead. So long as the principle of a responsible qualified head holds for individuals it is necessary, we consider, that it should be extended to all trading bodies which may legally trade as chemists. There is really greater likelihood of getting this than stopping the use of the title "chemist and druggist" by companies at present registered. A statement has been circulated by Mr. Jesse Boot to members of Parliament. Mr. Herbert Samuel is to take charge of the Poisons and Pharmacy Bill in the House of Commons, and will receive the deputation of M.P.s which Mr. Glyn-Jones had arranged to see Lord Tweedmouth (p. 916).

Corner for Students.

CONDUCTED BY LEONARD DOBBIN, Ph.D.

Students, please note. All communications should be addressed to the Editor of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

All communications and reports must bear the names and addresses of the writers, not necessarily for publication. The reports of those who ignore this rule are liable not to be dealt with.

THIS section first appeared in THE CHEMIST AND DRUGGIST of May 15, 1868, when it was "decided to offer every month a standard Scientific Book, or something equally appropriate, as a Prize to be competed for by assiduous students." For many years two book prizes (value 10s. 6d. and 5s.) have been awarded every month, besides three prizes (value two guineas, one guinea, and half a guinea), with parchment certificates, to those who have secured most marks in the six competitions comprising the Winter Tournament. All students of chemistry and pharmacy are eligible to compete, and may enter for the monthly prizes at any time.

The exercises are usually in the qualitative analysis of a mixture of two or three salts, samples of which are sent to students who apply for them on a date generally published in the third issue of the month. The reports by Dr. Dobbin are published in the last issue of the month.

English News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

The sons and daughters of the late Dr. George Napoleon Epps have given 1,000 guineas for the endowment of a bed in the new extension of the London Homœopathic Hospital.

A runaway horse dashed through the plate-glass window at the establishment of Mr. E. Guy, chemist and druggist, Eign Street, Hereford, on June 4, doing considerable damage.

A new social club, pavilion, recreation-rooms, and bowling-green have been provided by Messrs. Brunner, Mond & Co. for their workpeople at Lostock, near Northwich, at a cost of over 6,000*l*.

The licence attached to the business carried on by Mr. Charles Sangster, chemist and druggist, at Northgate Street, was transferred, at Chester, on June 4, to Mr. John Milling, chemist and druggist. (See Business Changes.)

The Court of Criminal Appeal refused on June 4 the appeal of Bertram Mortimer, alias Professor Sylvester (C. & D., May 23, p. 772), of "Gold-dust Cure" fame, and the sentence was increased from detention in the second division to imprisonment with hard labour.

The shops of Boots, Ltd., Lewis & Burrows, Ltd., Stewart's Drug-Stores, and Taylors' Drug Co., Ltd., in Stoke Newington, have by the efforts of the Early-Closing Association, been brought under the early-closing arrangement, and are now closed on Thursdays at 1 p.m.

At Old Street Police Court on June 5, John Oswald Cresswell Armstrong (30), described as a traveller, was sentenced to three months' imprisonment in the second division for embezzling various sums of money received by him on account of his employers, the Ambrosia Soap-works, Finsbury.

Considerable excitement was caused in Accrington last week owing to the motor-car of Mr. Slater, of Messrs. A. G. Slater & Co., Ltd., chemists, Oswaldtwistle, running backwards down an incline and dashing through a large plate-glass window of the Accrington and Church Co-operative Society's new premises in Blackburn Road. The chaffeur and a girl occupant escaped with a shaking.

Mr. F. A. Yeomans, chemist and druggist, 157 Knutsford Road, Warrington, went to the assistance of a youth named Hugh Parr (21), who jumped into the River Mersey on Monday night, June 8. Mr. Yeomans waded into the water without removing any clothes, then swam to Parr, who clutched at him, with the result that both went under. Mr. Yeomans managed to get free, and left the water in an exhausted condition, but Parr was drowned.

Hyman Fineberg, mineral-water manufacturer, 108 Oxford Street, Stepney, was fined 100*l*. and 5*l*. 5s. costs, or a month's hard labour, at the Thames Police Court, for storing a quantity of saccharin with intent to defraud the Inland Revenue. The saccharin had been stored at the house of one of his workmen named Levett, who was discharged. It was said that Fineberg had been fined 79*l*. at Sittingbourne in 1906 for smuggling saccharin, and was in a good way of business.

Penny Post to Morocco.

The postage on letters for places in Morocco where the British Post Office maintains an agency will be reduced, on and from June 15, to 1*d*. the ounce.

Concurrently the postage on letters for the United Kingdom and British Colonies and Protectorates and for Egypt posted at these agencies will be reduced to 10 centimes per 20 grams. The British Post Office maintains agencies at the following places in Morocco: Alcazar, Casa Blanca, Fez, Larache, Mazagan, Mequinez, Mogador, Rabat, Saffi, Tangier, and Tetuan.

Contracts.

Messrs. Walker & Harris, chemists and druggists, Sun Street, Canterbury, have secured the contract for the supply of drugs to the Canterbury Sanatorium for a year.

The tender of the Taylors' Disinfectors, Ltd., for the supply of disinfectants, carbolic acid 97 per cent., at 1s. 1½*d*. per gal., and carbolic powder at 3s. 7½*d*. per cwt., has been accepted by the Waterloo Urban Council.

The Sevenoaks Urban Council has accepted the tender of Paine & Powell for the supply of disinfecting-powder at 6s. 8*d*. per cwt., and the tender of the Lawes Chemical Co. for disinfecting-fluid at 6s. per doz. tins, and disinfecting-soap at 15s. 6*d*. per cwt.

Analysts' Affairs.

Mr. E. W. Pollard, B.Sc., pharmaceutical chemist, Ryde, has been appointed public analyst to the Isle of Wight County Council.

The samples of citrate of magnesia, tartaric acid, citric acid, and cream of tartar examined by the public analyst to the Berwick-upon-Tweed Town Council last quarter were all genuine.

The quarterly report to the Isle of Wight County Council by Mr. Otto Hehner states that the samples of olive oil and almond oil examined were genuine, and also that of eight samples of cream of tartar one contained ½ grain of lead per lb., but it did not appear to call for a prosecution.

Dr. Wynter Blyth, in his annual report as public analyst for Marylebone, states that the following drugs were analysed and found to be genuine: Tartaric acid 11, cream of tartar 5, and citrate of magnesia 1. Of seven samples of ginger wine examined two contained salicylic acid, as also did three out of six samples of raisin wine and one sample of black-currant wine. Port wine three samples, sherry one, orange wine three, red-currant wine one, and elder wine one proved to be free from this preservative.

Too Much Water.

The storm which raged over most of the United Kingdom on the night of Thursday, June 4, was felt with particular



severity at Tunbridge Wells. The shop of Mr. J. H. Bishop, chemist, The Broadway, was completely flooded, the water pouring into the cellar beneath to a depth of

four feet. The photograph taken by flashlight shows the fire brigade pumping the premises dry, an operation which took a considerable time and excited the interest of a large crowd of residents. The damage done to Mr. Bishop's stock was fortunately not very great, but much inconvenience was caused by the sudden deluge. The serried white rows on the roadway are hailstones, of which there was a heavy fall.

Suspected Antimony Poisoning.

The City Coroner opened an inquiry on June 5 into the death of Thomas William Ferguson (23), who died in St. Bartholomew's Hospital the previous day. The deceased was employed by Messrs. Burgoyne, Burbidges & Co., 14 Coleman Street, E.C., as a packer. He suffered from antimony poisoning five years ago, and it was supposed that he had again suffered. In the course of the evidence it was said that the deceased stated that he had been working with cocaine, strychnine, and perchloride of iron on the day he became ill, but he had not been using arsenic, and he did not mention antimony when he said he thought his illness was due to weighing up drugs. The father stated that another employé of Messrs. Burgoyne's, named Hicks, was ill; but a doctor's certificate was produced showing that the man was suffering from ptomaine poisoning due to eating bad fish. Dr. Patrick Black, house physician at St. Bartholomew's Hospital, said he attended deceased when he was admitted at 6.30 on June 3. The sufferer was somewhat collapsed and perspiring; his pulse was not weak, but became rapidly worse; he complained of thirst and pains in the stomach, and vomiting commenced at 1 P.M. The patient told witness he handled scheduled poisons, and had worked on the night shift until 9 P.M., and had subsequently bread and cheese for supper. Witness attributed his illness to the cheese. If it had been a case of antimony poisoning the symptoms—persistent vomiting, diarrhoea, and great thirst—would have appeared before, said witness, but he thought it would be as well to have an analysis of the stomach contents and the vomit, which had been kept. The inquiry was adjourned until June 24 to allow for the necessary analysis.

Birmingham Notes.

The premises of Mr. Richard Brown, chemist, Spring Hill, were burglariously entered last week, and the thieves carried away many electro-plated and silver valuables.

As a result of the terrific rainstorm on Wednesday, June 3, most of the shopkeepers of the centre of the town of Walsall, in which area are many chemists' shops, were flooded to a great depth in the basement of the premises.

Local botanists are invited to Berkswell by Mr. Miller to see a specimen of *laburnum à la harlequin*, there being three different-coloured blossoms on the same tree—namely, of *Cytisus purpureus*, *Laburnum vulgare*, and *L. Adami*.

It was discovered on Saturday morning last that thieves had during the night broken into the branch establishment of Boots, Ltd., at Five Ways. They secured a large haul of silver goods, and tore the mountings from bottles, books, photograph-frames, and other articles.

Pharmacology at Cambridge.

An important departure affecting pharmacology is proposed by the University of Cambridge. The General Board of Studies have received a memorandum from the Special Board for Medicine in which they state that the establishment of a University lectureship in pharmacology, to be held by Dr. W. E. Dixon, is strongly urged by the Downing Professor of Medicine (Professor Bradbury), with which view the Special Board concur. Professor Bradbury states that in carrying on the work of the pharmacological department he has for more than eight years been assisted by Dr. W. E. Dixon, and he thinks that appreciation of his services should now be made by the University. He therefore recommends that such recognition should take the form of a University Lectureship. The Special Board for Medicine believe that the increasing importance and development of pharmacology in recent years render it impossible for any holder of the Downing Professorship—a Chair which may be held by a physician engaged actively in professional practice—to superintend the teaching of pharmacology and the direction of pharmacological researches while fulfilling at the same time the other important

duties attached to the chair. The Special Board consider that the establishment of a University Lectureship in Pharmacology is urgently needed, and that to the University Lecturer when appointed should be assigned the teaching and the direction of researches in the pharmacological laboratory. The Senate of the University is accordingly recommended to authorise the appointment of Dr. Dixon as University Lecturer in Pharmacology.

Cricket.

Davy Hill & Co., at Chiswick, scored an easy victory over Heron by six wickets, the scores being: Davy Hill, 40 runs for four wickets; Heron, 38 runs.

Finsbury Carlisle C.C., at Hackney Marshes, made short work of Allen & Hanburys C.C., whom they dismissed for the small total of 8, they themselves scoring 124 for four.

Sheffield Pharmacy C.C. v. Leeds Chemists' C.C.—At Sheffield, on June 3, the "Loiners" secured the victory. Score: Leeds, 80; Sheffield 45. The visitors were entertained to high tea, followed by a smoker, at the Thatched House Hotel. Messrs. Whitby, Haslegrave, Crawford, and Bennett contributed to the evening's enjoyment.

Baiss Bros. Stevenson C.C. v. Stevenson & Howell C.C.—The result of this match, played at Dulwich Common on June 6, was an easy win for the emulsion team by 66 runs. Scores: Baiss, 96 runs; Stevenson & Howell, 30 runs. For the winners, Dyson took five wickets for 16 runs, and Gibbs five wickets for 14 runs. The chief scorers for Baiss were Dyson, Relife, and Gibbs.

The Leicester Pharmacy Athletic Club's cricket eleven played the Leicester Y.M.C.A. on May 28, and won by 18 runs. On Whit Monday they played East and West Langton C.C., and won by 19 runs. On Thursday, June 4, they met the Notts Chemists' eleven at the County Ground, Leicester, and, with a fast true pitch, a very exciting and pleasant game was played. The Notts team brought a goodly number of friends, including ladies. Captain Carr beat Captain Tomlin on the toss, and the Notts men took first knock to the bowling of Miles and Smith. Carr and Adamson soon settled down nicely, and played sound cricket until a good ball from Smith found its way past Carr's defence with the total at 27, of which Carr had made 15 with some pretty strokes. Prince followed, but was quickly bowled by Miles for 3. Adamson, however, played superbly, and with Henstock carried the total to 58 before the latter was dismissed for 24. Gooch, who made 24 not out, was the most successful bat on the Notts side, he playing with the utmost confidence. Adamson played a patient innings of 22 in good style. The total eventually reached 120, Miles taking 4 wickets for 51, Chawner 3 for 37, Smith 1 for 19, and Bolton 1 for 2. The Leicester men started badly, losing Huzzard with 4 on the score-sheet, but Marfitt and Smith gradually altered the look of things until the former left at 38, of which he had made 16. Smith continued playing well, and was eventually run out for 25. Chawner not out 12, Miles 10, and Scholes not out 7 were the other chief contributors to a total of 79 for 7 wickets when time was called. Gilborn and Meadows bowled excellently, the former taking 4 wickets and the latter 2. Lee also bowled well, with hard luck and without success. During the interval between the innings light refreshments were served, and after the match the whole party, reinforced by others to the total number of between seventy and eighty, adjourned to Winn's Oriental Café, Market Place, where high tea was served. Mr. F. J. Brett, President of the Leicester Club, in a happy speech, extended a most hearty welcome to the visitors, and congratulated the teams on their display. Mr. C. F. Carr, the Notts captain, responded. The rest of the evening was devoted to music, provided by Miss Fry, Miss Ida Green, Mr. J. H. Miles, Mr. H. H. Dennis, Mr. Fry, and the Hamoril Concert Party.

SMALL BOY: "I want some medicine to reduce flesh."
Chemist: "Anti-fat?" Small Boy: "No—uncle."

CHEMIST: "How is your daughter keeping?" Scotch Matron: "She's up an' oot again. But the doctor says 'Nae mair o' thae pewmonae blouses.'"

C. & D. DOSE TABLES.—The "Medical Press" of May 13, in commenting upon the C. & D. "Doses for Students of Pharmacy," says: "The little book is handy in form and likely to be very useful to those for whom it is intended."

Irish News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Pharmaceutical Society of Ireland.

Applications for the undermentioned examinations should be lodged with the Registrar by 11 A.M. on the respective dates: For the Preliminary examination, June 18; Pharmaceutical Licence examination, June 24; Pharmaceutical Assistant examination, June 29; Registered Druggist examination, June 30.

Using Medical Titles.

Early in the year James McGuire was charged at the Dungarvan Sessions with using certain medical titles without being registered by the various Colleges whose titles he employed. The case was dismissed, as the Magistrates held that the power to prosecute was vested in the General Medical Council. On June 9 an order was made in the King's Bench Division of the High Court, Dublin, compelling them to state a case for the consideration of a higher Court.

British Dental Association.

The annual Conference of this Association was opened at Belfast on June 6 with an address by Mr. J. C. Oliver, Cardiff, the retiring President. Mr. J. J. Andrews, Belfast, was elected President for the ensuing year. Among the papers was one by Mr. Edward Wallis, in which he urged the importance of dental clinics in connection with elementary schools. He stated that not less than 70 per cent., and in many cases 90 per cent., of the children attending public schools were affected by dental caries.

Poisons and Pharmacy Bill.

At the meeting of the Irish Cattle Traders' Association, on June 4, the Secretary reported that the Joint Committee of the Lords and Commons had decided that Ireland should be included in the new Poisons Bill. Under this decision the County Councils would have the power to grant licences to unregistered shopkeepers to sell poisonous sheep-dips wherever the Local Authority considered that the convenience of Irish farmers made such action necessary. He also directed the attention of the Association to the fact that it had been alleged that Mr. Walter Long, M.P., was now opposing this Bill being extended to Ireland. The President of the Association (Mr. Wm. Field, M.P.) said he could hardly understand how such an allegation could be accurate, in view of the fact that Mr. Long, some time ago, was strongly in favour of the position taken up by that organisation in its efforts to have Ireland included in the Bill. The Secretary was directed to communicate with Mr. Long, M.P., drawing his attention to the paragraph referred to, and asking him if there was any foundation for same.

Locum Tenens Payment.

Some discussion took place at the meeting of the Clonmel Guardians in reference to the payment required by the medical officer for performing the duties of Mr. Harvey, the dispenser, who has been ordered to take a holiday to recoup after an attack of influenza. Mr. Harvey receives 1*l.* a week for dispensing at Clonmel and Ballyclerihan, but Dr. Carroll's charge as a *locum tenens* was stated to be 2*l.* Eventually it was decided to find out whether a local chemist would not undertake the work at 1*l.* a week.

An Ozonia Order.

At the Naas Quarter Sessions on June 2, Ester Margaret Jay, trading as the Ozonia Co., Dublin, sued Thomas J. Dillon, Kilkullen, for 4*l.* 18*s.* for Ozonia. Defendant said that plaintiff represented that Ozonia, a cure for rheumatism, had a big sale in the district, and agreed to give him the monopoly of the supply to the neighbourhood. Plaintiff said that Dillon was appointed agent, and his name was advertised as such in the "Leinster Leader." Defendant said there was no sale for the article, and he wrote to the company asking them to take back the goods and he would pay all expenses. His Honour Judge Barry, referring to the order, said it was a contract in writing, and did not contain any warranty as to the sale of the article. He gave a decree for the amount claimed.

Salts or Nitre.

At the Drogheda Quarter Sessions last week, a farmer, named Flynn, sued a general trader, named Magee, of Drogheda, to recover 10*l.* damages for injuries and loss sustained. Plaintiff alleged that he purchased from defendant 1 lb. of Epsom salts for the purpose of drenching a cow, and that he was supplied with saltpetre instead. The cow died as the result of the mistake. He gave the animal 12 oz. of the stuff and kept the remainder for future use. When the animal died he did not know the cause of death, and it was only on proceeding to use the remainder that he became aware of the mistake. Evidence was given by the defendant's assistant that Epsom salts and saltpetre were kept in separate packages and in different drawers, and were made up at different times. It would be impossible to supply one article for the other. His Honour Judge Kisbey said the case was a very important one. Shop assistants were as liable to make a mistake as anyone else, and he believed that saltpetre (nitre) was given in mistake for salts. He gave a decree for 8*l.* and a guinea expenses.

Business Items.

Mr. R. M. Park, pharmaceutical chemist, has acquired the Phibsborough Pharmacy, lately owned by Mr. George Grahame Fetherston.

Messrs. Hayes, Conyngham & Robinson, Ltd., pharmacists, Dublin, have opened a branch at North Circular Road, Phibsborough, Dublin.

Personal.

Alderman J. C. McWalter, Ph.C., M.A., M.D., etc., Dublin, has been returned at the head of the poll as Poor-law guardian for the North City Union.

In the Second Professional examination of the Royal College of Surgeons in Ireland, held recently, Mr. Fred. Warren and Mr. T. Mather Thomson, pharmaceutical chemists, passed "with honours."

Dr. Patrick Merrin, pharmaceutical chemist, Harcourt Street Dublin, has disposed of his pharmacy and surgery in Montague Street to Dr. Palmer, and has left Ireland for Australia, where he will reside with his sons.

At the annual Conference of the Irish Branch of the National Federation of Postmasters, held in Belfast on Monday, Mr. William Shaw, chemist and druggist, Grosvenor Road, Belfast, and Mr. W. A. Frizzell, registered druggist, Portstewart, were elected on the committee for the year. Both gentlemen are sub-postmasters.

Welsh News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Co-operatives and the Sale of Poisons.

At the annual Co-operative Congress, held at Newport this week, the Parliamentary Committee in their report referred to the Government Poisons and Pharmacy Bill, with the main provisions of which they were in entire agreement, but they had asked for permission to give evidence before the Select Joint Committee for the purpose of stating the position and views of the co-operative societies in regard to the sale of drugs. They understood that there was another Bill likely to be introduced under the auspices of the Pharmaceutical Society which would be more opposed to the rights now enjoyed by societies and companies of dealing in drugs which contain poisons. This Bill would have their careful attention, and strenuous opposition if it was found to contain certain provisions detrimental to a business which societies carry on in their drug departments. Mr. T. Tweddell, of Newcastle, moved:

That this Congress protests emphatically against any alteration of the law which would have the effect of preventing co-operative societies and companies carrying on the business of chemists and druggists, provided that qualified men are placed in charge of each such department of business; and that it protests especially against the proposal which has been made in a Bill before Parliament, that a company or society carrying on such business shall have a qualified chemist on the board of its directors, believing as we do that the public will be sufficiently protected and the requirements of the law adequately observed by having a

qualified servant in charge of each such department of a society or company.

He said that two Bills had been submitted to Parliament on the question—one under the auspices of the Government and the other under the auspices of a trade association, which in these questions at any rate were hostile to institutions like theirs. The proposal was in the interest of private traders, and intended to hamper and hinder movements like theirs. He had been told by the Chairman of the Lords' Committee that, so far as the obnoxious proposal was concerned, they need have no concern about it. Mr. G. Wheelhouse, Barnsley, seconded, and remarked that it would be an injustice to any society if such a law was enforced. The motion was carried.

Co-operative Remuneration.

The Co-operative Congress adopted a minimum scale wage for all young persons of twenty-one years and under. Young men of twenty-one are not to receive less than 24s., and young women of twenty not less than 17s. a week. The wages are graduated down to fourteen years, at which age the boys are to commence at 6s. and the girls at 5s. a week. They each rise 2s. a week up to seventeen years, but after that age the boys get 3s. and the girls 2s. advance each year. The scale is not to be compulsory on the branches, but recommendatory only.

Scotch News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Aberdeen.

Mr. James Farquhar, chemist and druggist, is opening a pharmacy at 340 Great Western Road, Aberdeen.

The Northern Co-operative Co.'s premises at 33 Rosemount Viaduct, Aberdeen, are the head dépôt, and not a branch as stated last week.

A new sub-post office is to be opened in Great Western Road, to be called Forest Avenue Post Office. Mr. James Farquhar, chemist, has been appointed sub-postmaster.

Mr. James Milne, chemist, Midmar, while riding his motor cycle at Huntly last week, came into violent collision with a motor car, and was rendered unconscious for a considerable time. Later reports, however, show that he is improving. A few days before the accident occurred Mr. Milne was elected hon. president of the Aberdeenshire Auto Motor Club on its formation.

Dundee.

Mr. Thomas S. Peebles, chemist, Lochee, has undergone a rather serious operation, but is making a satisfactory recovery.

The chemist's shop in Scouringburn known for more than a generation as "Mackay's" is now closed—Mr. Reoch, the owner of the business, having removed to a double-fronted shop on the opposite side of the street.

At the annual meeting of the Governors of Dundee Royal Infirmary, held this week, the Chairman said the cost per occupied bed amounted to 57l. 3s. 2d., which is considerably under the cost in other hospitals of a similar character in Scotland, and scarcely more than one-half of the cost of many in London.

Edinburgh.

Mr. J. Thomson (lately with Baildon's, Prince's Street) is opening a pharmacy shortly in Ferry Road.

A drug-store in Leith displays the announcement: "Prescriptions Accurately Dispensed." So says a local evening paper.

Another Blow to Chemists!—A Health League, with the object of promoting the natural means by which health may be attained, has been formed in Edinburgh.

The first botanical excursion of the Edinburgh Chemists', Assistants' and Apprentices' Association for the summer took place on Friday, June 5, when about thirty members travelled by the 8.10 p.m. train to Inveresk, under the leadership of Mr. W. B. Cowie, Ph.C., F.C.S.

The competition for seats on the Executive of the North British Branch is again keen. With the voting papers

there has been issued a long statement by Mr. Rutherford Hill in regard to the title question, and a form of petition to be signed by doctors in support of the reservation of titles to individuals who have earned them by education and examination.

Glasgow.

Mr. Colvin Gates, Ph.C., St. George's Road, Glasgow, has had his pharmacy-window modernised.

With the advent of the hot weather chemists are having a run on "salines" and other effervescent preparations.

"Zam-Buks" is the name of a gang of youths who fought with the "Pen-Nibs" on the South Side on Saturday night. Four of them were arrested.

Falkirk Medical and Pharmaceutical Bowling Association

A meeting was held in the Crown Hotel, Falkirk, on June 5, Mr. J. W. Bennie (President) in the chair, and the prizes won during the season were presented to the winners. Single-handed ties, first prize and Baxter medal, Mr. J. W. Bennie, chemist and druggist, Polmont; runner-up (prize presented by Messrs. Burroughs Wellcome & Co., London), Dr. George Gardner, Falkirk; consolation tie (prize, a pair of bowls presented by President), Mr. Robert Sinclair, chemist and druggist, Falkirk. Pairs competition, Dr. Smith and Dr. McCracken. Dr. Smith's prize was a pocket medicine-case presented by Messrs. Allen & Hanburys, Ltd., London, and Dr. McCracken's prize was an "Extra Pharmacopœia" presented by William Martindale, London.

French News.

(From the "C. & D." Paris Correspondent.)

M. CARBONNIÈRE, the pharmacist, who formerly acted as professor of pharmacy and materia medica at the Sadiki Hospital, Tunis, has just been nominated officer of the Academy.

CORKS.—It appears that the foreign cork is slowly but steadily supplanting the home-made article in France. In 1907 France imported 1,442,900 kilos, and exported 882,600 kilos., and 1908 shows a further progress of the foreign invasion.

M. GASTON POLLONNAIS wrote for the recent annual *Matinée de Gala* of the Pharmacy Students' Amical Association a prologue in verse, of which this is a specimen:

Vous donnez aujourd'hui, vous donnerez demain—
L'alambic d'où s'échappe une liqueur féconde,
Le pilon qui pétrit la santé pour le monde,

La poudre qui ravive au lieu de massacrer
Quelle œuvre gigantesque et noble à consacrer.

THE OLD ORDER CHANGETH.—Interesting relics of old Paris doomed to demolition in the course of systematic street-improvements are the buildings in the rue des Francs-Bourgeois, the heart of the wholesale drug-trade of the French metropolis, bearing the numbers 34, 36, and 38. No. 36 is the Pharmacie du Bon Pasteur, with its quaint sign representing the Good Shepherd, and No. 38 is a very ancient building with projecting upper storeys occupied by Coutela & Co.'s wholesale drug-house. The narrow alley adjoining is where Louis d'Orleans, brother of King Charles VI. of France, was assassinated by Jean Sans Peur, Duke of Burgundy, in 1407, when coming out of the Hôtel Barbette, one of the historic mansions, so many of which are now drug warehouses.

HISTORICAL MEDICINE.—The Medico-Historical Society recently formed, with Professor Landouzy and M. Victorien Sardou as joint Presidents, will study those problems which keenly interest the Lombroso school of criminologists. M. Lucien Descaves, the well-known writer, has summarised in a leader in the "Figaro" some of the discoveries of the new school of investigation. The physical and moral weaknesses of that amiable triplet of French "minarets," François II., Charles IX., and Henri III., are too well known to need comment; but it is interesting to learn that Emperor Charles V. was a *dégénéré*, Louis XIV. a megalomaniac, Christina of Sweden a "crowned hysterical," and François I. was merely tuberculous. The epileptics present such a brilliant galaxy that one almost regrets not to belong to their ranks, and resemble Richelieu, Pascal and

Flaubert, Schiller, Newton, Mozart, Handel, and Wagner! Napoleon I., however, was not epileptic—merely a “nervous arthritic”; nor was Queen Marie Leczinska, although she was the child of a “gouty, obese, alcoholic” father, and a mother who died dropsical and mentally imbecile. If such are the great, *juges plutôt*, what are the lesser ones of mankind?

NAPOLEON'S CARE FOR HIS TEETH.—Napoleon I., although he paid a handsome yearly salary to his dentist, Dubois, appears never to have had need of his services except for simple cleaning operations. This was probably due in a great measure to his extreme care of his teeth. Every morning when rising (M. Frederic Masson tells us) he first cleaned his teeth with a boxwood toothpick, brushed them long and carefully, first with a tooth-brush dipped in opiate and afterwards with powdered coral, finishing off by thoroughly washing out the mouth with cold water slightly diluted with brandy and scraping his tongue. The fact that the tooth-brush is the only article in the toilet-set at the Musée Carnavalet which shows signs of wear was recently commented on in the *C. & D.*

JUNGFLEISCH ON THE HOSPITAL PHARMACIST.—The attendance at the recent annual banquet of *internes* in pharmacy was exceptionally numerous—a fact partially attributable to the circumstance that the chair was taken by Professor Jungfleisch, the successor of Berthelot, and one of the most popular figures among modern pharmacy professors. He did not disappoint expectations, but in a charming little discourse insisted on the services the *internat* of Parisian hospitals rendered alike to pharmacists and the public. He humorously declared that since he had quitted the Salles de Garde, the Lariboisière, and La Pitié Hospitals, “where all the forms of the orator's art were cultivated,” he had had little practice in proposing toasts; but the *internat* always reminded him of arduous, enthusiastic, hopeful youth, and had for him the most pleasant of recollections. He hoped head pharmacists and *internes* would stand shoulder to shoulder to defend an institution which “groups the most highly educated of the younger pharmacists,” for “many hospital surgeons know and appreciate the value of the co-operation” of their pharmaceutical *internes*. The cost of the *internat* is small compared with the results, he continued, and the Poor-law administration benefits by the emulation of competition which keeps the service on a high scientific and professional level. On the other hand, in spite of disadvantages, the *internat* enables the struggling student to terminate and prolong his professional studies. Besides these material advantages the close actual contact with doctors and invalids, impossible in after-years behind the counter, is valuable. The Salles de Garde is a training for the character; one learned, in its atmosphere of frank discussion, to know oneself as well as one's comrades, to practise tolerance and friendliness. He confessed he had there learned many valuable lessons which had stood him in good stead in after-life.

Canadian News.

(From the “C. & D.” Correspondent.)

PERSONAL.—Dr. Howard T. Barnes, of McGill University, has been elected President of the Chemical Science, Physics, and Mathematics Section of the Royal Society of Canada.

FIRE.—A fire, which started in the laboratory, recently broke out on the premises of the John T. Lyons Drug Co., Montreal. Damage, covered by insurance, was done to the extent of \$15,000.

THE MONTREAL COLLEGE OF PHARMACY held their annual meeting on May 21, Mr. David Watson (President) in the chair. The following were elected as members of the Executive Board for 1903-9: Messrs. J. E. Tremble, L. A. Bernard, J. M. Aumont, M.D., M. Albert, Thos. R. Goulden, W. S. Stone, C. J. Covernton, Leo G. Ryan, and H. W. Reynolds; David Watson (President), W. H. Chapman (Vice-President), and E. Muir (Treasurer).

JAPANESE AGAR-AGAR.—The exports from Japan during 1907 amounted to 1,480,385 lb. (74,4747), against 1,499,800 lb. (71,2297) in 1906 and 1,571,564 lb. (62,3907) in 1905.

Australasian News.

The fullest information regarding the Australasian drug-trade and pharmacy is given in “The Chemist and Druggist of Australasia,” copies of which can be obtained at 6d. each, post free from the office of “The Chemist and Druggist,” 42 Cannon Street, London, E.C.

New South Wales.

PROPRIETARY MEDICINES.—The delegates from the London Chamber of Commerce returned to Sydney early in May and left for New Zealand on May 6, expecting to return to Melbourne about June 1. While in Sydney they were entertained on May 2 by the Manufacturing Chemists' and Proprietors' Association at a harbour picnic. They were taken in a motor launch round the south shore of the harbour, and as far as Killarney on the main arm of the middle harbour.

Queensland.

LABELLING DISINFECTANTS.—The Pharmaceutical Society of Queensland has called the attention of all members to the following:

The Health Act of 1900, Section 104.—Any person who sells or exposes for sale any substance or compound under the name or description of or with intent that the same may be used as a disinfectant, deodoriser, germicide, preservative, antiseptic, sanitary powder, or sanitary fluid, without disclosing the name or names of such substance or compound, and the percentage of the active ingredients contained in the same by a label distinctly and legibly written or printed on or with the substance or compound, shall be liable to a penalty not exceeding fifty pounds.

(N.B.—The words to be put upon the labels are in inverted commas.)

Calvert's	Carbolic Preparations	All labelled with percentage of Carbolic Acid except concentrated Carbolic Acid. No. 4 Carbolic Acid “Contains 90% Carbolic Acid.” No. 5 Carbolic Acid “Contains 90% Carbolic and Cresylic Acids.”
Jeyes'	“Cyllin”	“Carbolic Coefficient for Bacteria Typhus 15.0.”
Little's	“Phenyle Disinfectant”	“Contains as its active ingredient 10% phenols.”
(N.B.—The proprietors wish to draw attention to the fact that Little's Fluid Dip is sold for use on animals only, and not as a disinfectant.)		
McDougall's	Disinfecting Powders	have percentage of active ingredients on container.
McDougall's Newton, Chambers & Co.'s	Liquid Preparations “Izal”	information expected shortly. “Contains 40% ‘Izal’ oil.”
Parke, Davis and Co.'s	“Kreso”	contains “Hydrocarbons neutral 43 parts” “Hydrocarbons basic 1 part” “Hydrocarbons acid 21 parts.” “In 105.5 parts,”
Quibell Bros.	“Kerol”	“Carbolic Coefficient for typhoid organism 14.0.”
Sanitas Co.'s	“Sanitas” Fluid	“Contains as active ingredients Peroxide of Hydrogen of 2 volumes strength or under, and camphoraceous constituents, including Thymol, amounting in all to under 5%.”
Schering's	“Formalin”	“A 40% solution of Formic aldehyde.”
Schulke and Mayr's	“Lysol”	“Contains 50% of pure Cresylic Acid.”

In the case of any carbolic acid or other disinfectant purchased by you in bulk to retail in smaller quantities, the wholesale firm from whom the preparation was purchased will, no doubt, be pleased to give you what information you may require to enable you to comply with the Act; and my Council will be pleased to endeavour to procure for you such other information as may from time to time be required.

Victoria.

THE ANNUAL REPORT of the Pharmacy Board for the year 1907 devotes some space to inter-State reciprocity. The question asked in the Legislative Assembly on November 6, 1907, by Mr. Lemmon, as to why the Victorian Board refused to register a person holding the West Australian qualification in view of the fact that New South Wales, Queensland, and Tasmania recognised the certificate of Western Australia, and if the Chief Secretary would take

the necessary steps to admit such persons to practise their profession in Victoria was referred to the Board, who replied that no application for registration had been received from any person who had qualified by examination in Western Australia. It was resolved to submit to the Governor-in-Council a regulation providing for the registration of persons holding the certificate or diploma of competency of the Pharmaceutical Council of Western Australia, subject to the acceptance by that Council of the terms and conditions of the reciprocity agreement entered into between Victoria, New South Wales, and South Australia on February 1, 1903. It was also decided to make a similar offer to the Pharmacy Board of Queensland. The Pharmaceutical Council of Western Australia replied that the matter had been considered at length, and it had been resolved to await the replies of other interested societies and boards before giving a definite answer, and that in any case an alteration in the existing regulations would be needed. Although some time has elapsed, no further communication on the subject has been received. The Pharmacy Board of Queensland, in reply to a similar offer, stated that it would be glad to reciprocate with the Pharmacy Board of Victoria on an examination-basis, if the Victorian Board was prepared to enter into a similar agreement, but the Queensland Board were not prepared to enter into any agreement recognising all persons on the pharmaceutical register on the basis of the present reciprocity agreement between New South Wales, South Australia, and Victoria. A similar offer was made to the Pharmaceutical Society of Tasmania, but owing to the existence of legal difficulties the matter is still the subject of correspondence. The agreement entered into on February 1, 1903, has resulted in the following registrations: In Victoria, under New South Wales certificates, 14, under South Australian certificates, 7; in New South Wales, under Victorian certificates, 13; in South Australia, under Victorian certificates, 9; so that Victoria has registered 21 pharmacists from other States, and 22 Victorian pharmacists have been registered elsewhere.

Western Australia.

MR. J. M. REES, pharmaceutical chemist, late of Portsmouth, England, has taken over the business formerly carried on by Crake & Co., 7 Adelaide Street, Fremantle.

Colonial and Foreign News.

THE FINLAND SOCIETY OF PHARMACISTS has been agitating to prevent the importation of patent medicines and secret remedies, with the exception of preparations containing iron, arsenic, quinine, etc., the contents of which are published by the makers and which should be sold exclusively in pharmacies. At present the Customs authorities do not propose to give effect to the demand.

CORFU OLIVE OIL.—The Corfu oil crop for 1907-8 is estimated to be about 200,000 barrels of 16 gals. each, equal to 12,500 tons, one-half being edible and the other half used for machinery and burning purposes in the Orthodox churches in Greece and Russia. The export for 1907 amounted to 52,863 barrels, equal to 3,304 tons, which was the stock of 1905 and 1906. A very small quantity of the 1907-8 crop has been exported, as the greater part of the fruit is still being gathered. The above 52,863 barrels were distributed between Russia (18,738), Austria-Hungary (12,213), France (6,127), Spain (3,712), United Kingdom (3,595), Germany (2,745), etc.

RUSSIAN STORES.—The sensational news about the granting of permission to pharmaceutical stores to deliver medicines on doctors' prescriptions is to a certain extent confirmed. These stores hitherto have had the right to sell crude drugs only, but are now getting the right to sell in labelled bottles or parcels any simple medicines prepared in chemical and special laboratories—viz., plasters and ointments in small quantities, powders divided into doses, the more simple tinctures and extempore solutions, such as iodide of potassium solution. The stores will not be allowed to make up complicated remedies, and the "Petersburgsky Zistok" is informed that the owners of stores must possess qualifications not inferior to that of pharmacist.

South African News.

(From the "C. & D." Correspondents.)

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

South African Pharmaceutical Association.
Pharmaceutical Society of Cape Colony.
Natal Pharmaceutical Society.
Transvaal Pharmaceutical Society.
Rhodesia Pharmaceutical Society.
Northern District Chemists' Association.
Pharmaceutical Society of Orange River Colony.

Cape Colony.

LICENCES TO PRACTISE as chemists and druggists in Cape Colony have been issued by the Colonial Secretary, upon the recommendation of the Cape Pharmacy Board, to James Henry Nimmo and Niel MacKay, registered chemists and druggists of Great Britain.

CHELSEA PENSIONER.—An advertiser in the Cape Town Press offers to send the formula of the "Chelsea Pensioner" to anyone suffering from rheumatism in return for a stated remittance; for an extra few shillings it will be made up and sent on. A Cape Peninsula chemist has written to the "Cape Argus" giving the formula as published in "Pharmaceutical Formulas," adding that any chemist will make it up for 2s. 6d. According to some local chemists, it was unwise to state a price, since they will not fill calls at half-a-crown each.

KAFFIR MEDICINE.—At the Woodstock Police Court, Martinus Louw (70), a bald-headed wizard-like old Kaffir, was charged with contravening the Medical and Pharmacy Act (1891, Act 34) by practising medicine at Parow in December last. The evidence was of rather an extraordinary nature. Among other things were "white bones" which the seer consulted, a bag which he gave patients to wear "to drive the devil away." Rheumatism was described as the result of a "Malay trick," and rupture was treated with ointments. The unfortunate patient in this case was told that the injury had been done by his best friend, although the sufferer knew that it had been done by the kick from a mule. Several of the witnesses were Europeans, who showed wonderful credulity while under the old man's treatment. The case is still proceeding.

Orange River Colony.

LOCAL TENDER.—Messrs. Heynes, Mathew & Co., of Bloemfontein, have secured the tender for the supply of drugs and surgical dressings to the National Hospital.

O.R.C.P.S.—The annual general meeting of the Pharmaceutical Society of the Orange River Colony was held at Bloemfontein on May 12, when those present included Messrs. Auld, Carter, Dunkerton, Friedman, Fyffe, Hewitt, Hutcheson, Jeffreys, Nicol, Main, Reid, and Taylor. The principal business was to elect officers for the ensuing year, and after the usual preliminaries the following were elected: Mr. S. S. Hewitt (President), Mr. F. Carter (Vice-President), Mr. S. Taylor (Secretary), Mr. A. Auld (Treasurer), and Messrs. Dunkerton, Hutcheson, Main, and Reid (committee). The new President outlined his policy for the year, which consisted mainly in obtaining fuller representation for the chemists, either by the creation of a separate Pharmacy Board or, failing that, the addition of a number of elected chemists to the present Medical and Pharmacy Council. At the same time he pointed out that it was only four years since the Medical and Pharmacy Ordinance was passed, which took away from general dealers the right to sell poisons indiscriminately, and from doctors the right of keeping chemists' shops. He expressed the opinion that any immature or ill-advised agitation for further privileges might result in those already obtained being taken away or cut down, as the legislative power now rests with an assembly composed of mostly lawyers and farmers, whose sympathies are with the general dealer rather than the chemist. A number of letters from country chemists were read, as well as a letter from the Medical and Pharmacy Council asking for the opinion of the Society on the question of

reciprocity. These matters were referred to the committee, and their recommendations will be considered at a special general meeting of the Society to be held on May 26.

PHARMACEUTICAL SOCIETY OF CAPE COLONY

A SPECIAL GENERAL MEETING of the Pharmaceutical Society of Cape Colony was held at Cape Town on May 13, the President (Mr. F. C. Mathew) being in the chair. Those present included Messrs. J. McJannet and W. K. Mager (both Eastern Province chemists and members of the Colonial Pharmacy Board), Mr. George Darroll, of Cape Town (one of the Government nominees on the Colonial Pharmacy Board), Mr. J. S. North (Vice-President of the Society), Messrs. C. F. Cleghorn, Austin Thomas, J. Sowden, J. Clayton Smith, J. S. C. Marcus, A. E. A. Tothill, and the Secretary. The President gave a hearty welcome to the Pharmacy Board members, in view of the fact that the question of the Cape educational examination (as accepted by the Board) was to be discussed.

EXAMINATION STANDARDS.—Mr. Clayton Smith reviewed at length the general education of candidates presenting themselves for examination at the Cape. According to the Act, after January 1, 1896, no candidate could be admitted for examination unless he presented a certificate that he had passed a standard in preliminary and general education as follows:

Any Preliminary examination accepted as such by the Pharmaceutical Society of Great Britain, or the School Higher examination of the Cape University, or any examination of a legally constituted examining body, approved by the Pharmacy Board, provided that in each instance English, Latin, and arithmetic were included in the subjects of the examination for which the certificate was granted.

Mr. Smith's contention was that a candidate might have failed in Latin—a most important subject from their point of view—yet have secured sufficient marks in other subjects at the "School Higher" to get a certificate that he had passed, which the Board, under the Act, was bound to accept. It was not a question of lowering the examination, but of altering the present one with a view to making it more useful as an educational test prior to the Board's ordinary examination. If a candidate failed in Latin he should not be examined until he passed in that subject. The suggested scope of the examination, which was based on the syllabus of the Cape School Higher examination, and which was before the Society, read as follows:

English.—Grammar, including parts of speech, parsing, analysis of sentences. Dictation, testing knowledge of syntax and accidence. Composition. Short essay on some subject of general interest.

Latin.—Grammar. Parts of speech. Parsing. Translation of passages from the first book of *Cæsar*.

Arithmetic.—Metric system. Vulgar and decimal fractions. Proportion. Percentages. Mensuration. Simple and compound interest. Profit and loss. Discounts. Square and cube roots.

Concluding, Mr. Smith said that he thought this suggested scope of examination was better than the one now in force. Mr. McJannet, after thanking the Society for its welcome, said that he was not in favour of the lowering of the standard of the examination in any way. In England, the Cape School Higher examination was accepted, provided the candidate knew a modern language. He suggested that the Society should put their views in writing, and send them to the Pharmacy Board, when the matter could be dealt with. He could not say what attitude the Board would take up, but they had his sympathy in any movement for the betterment of pharmacy, and he would support any measure for more frequent examinations, but, as they knew, very few candidates came forward. [It should be stated, our correspondent writes, that when a youth fails at the School Higher examination he has to wait twelve months before he again presents himself.] Mr. Mager endorsed Mr. McJannet's remarks. He did not wish to see the standard lowered. They all knew what a "plodder" the Colonial boy was. The Society was now asking for an alteration in the Act. Could it be done? He suggested that they should communicate their views to the Board, acquainting that body with all the facts, when he for one would support it, so long as no attempt was made to lower the standard. Mr. Smith twitted the Board members present on the fact that they accepted the Cape School Higher certificate without knowing if the candidate had passed in Latin or not; but the Board members did not reply to the soft impeachment. Mr. North said that the local graduate of pharmacy was better than the imported. He wanted to see more apprentices, and of a better class. Chemists should conduct the examinations on their own account. He thought

that the time was not far distant when their Society would have its charter on similar lines to that of Great Britain. A Member: Is it intended that the Pharmacy Board should conduct this special examination?—Mr. North: It is for them to make some arrangement with the schools. The fees could be raised, if necessary, to cover the extra cost. The matter was then passed on to the Executive of the Society, who will address the Board on the subject. The South African Pharmaceutical Association supported the syllabus suggested by the Society, provided the subjects mentioned did not go below the standard of the "School Higher," and that Latin was made compulsory. The S.A.P.A. further recommended that the old London Pharmacopœia and Ince's "Latin Grammar" be used as text-books for the students, and that quarterly examinations be held. The Northern District Chemists' Association (Kimberley) wrote that they did not approve of the Society's suggested syllabus. They did not consider the "School Higher" at all difficult, but Latin should be compulsory. To obviate waiting a year, if a candidate failed at the November examination, some arrangement should be arrived at with the educational authorities to hold another examination, say, in May of each year. The N.D.C.A. thought that the Cape University Matriculation examination should be aimed at as the standard for the Preliminary in the future. The Pharmaceutical Society of the Transvaal wrote that the Executive Committee saw no reason for any change to a special Preliminary examination. The number of apprentices in the Transvaal was small. The Transvaal Pharmacy Board accepted the College of Preceptors', the "School Higher," and the Cape Matriculation. Other examinations were considered on their merits, but in every case Latin and mathematics were compulsory. The Pharmaceutical Society of Natal acknowledged a letter on the subject. Mr. John Parry, of Kimberley, member of the Colonial Pharmacy Board, wrote regretting his inability to be present. He would support the idea of holding the School Higher examinations more frequently.

India and the East.

(From "C. & D." Correspondents.)

MESSRS. P. B. PETIT & Co., of Bombay, are to establish works in Kashmir for the preparation of nitrate of calcium for use as an artificial manure.

PERSONAL.—Mr. W. Cotton, partner of Messrs. E. Plomer & Co., chemists, Simla and Lahore, has been elected Master of the Punjab Trades Association.

OPIMUM RESTRICTIONS.—New restrictions with regard to the sale of opium were put in force in Burma on May 1. Not more than 6 lb. of the crude drug and 250 lb. of the tincture may be stocked at one time, and not more than 2 lb. of crude drug and 20 lb. of tincture may be sold at any one time. Full particulars of each sale must be recorded in a book specially kept for the purpose.

MORPHINE IN BURMA.—A notice has been issued by the Calcutta Customs Collector giving the following revised rules for the exportation of morphine to Burma: (a) Morphine manufactured in India may not be imported into Burma; (b) morphine produced out of India may not be imported into Burma except by medical practitioners and by specially licensed pharmacists. A pharmacist may not import morphine unless he has been granted a special licence which authorises both the import and the sale of morphine.

SPIRIT METHYLATION.—Owing to the fact that methylated spirit is being extensively used for human consumption in Rangoon, Burma, the Customs authorities have insisted on the use of caoutchoucine for methylation. This gives a distinctly unpleasant odour to the spirit when used for burning purposes, and is a decided drawback in hospital use. However, there appears to be a clause whereby the latter difficulty can be overcome, and wood naphtha be used instead of caoutchoucine, without paying any higher rate of duty.

BOMBAY MEDICAL CONGRESS.—In connection with the Medical Congress having special reference to tropical diseases and sanitation as applied in India, which is to be held in Bombay in February 1909, there will be an exhibition of sanitary and medical and surgical appliances, as also of lantern slides and microscopical and pathological specimens. Mr. C. W. White, Howard Hotel, Norfolk Street, Strand, London, has consented to interview intending exhibitors and to give them detailed information during the months May to October.

Japanese Gittings.

(From the "C. & D." Correspondent.)

PHARMACEUTICAL TECHNOLOGY is to be made a part of the curriculum of the pharmacy department in all the Japanese medical schools.

PHARMACY IN KOREA.—The Imperial Government of Korea is to open a College of Pharmacy in April 1909. This is an entirely new departure in Korea.

PATENT MEDICINES.—The Dutch East Indies are taking kindly to Japanese patent medicines, and already sixty-six different kinds have been registered there. It is expected that another thirty-two will be registered before the end of the present month.

IMPORT DUTIES ALTERED.—By an Ordinance dated March 29 the duties on the following articles have been altered to the rates stated, and they will come into force on October 1, 1908: Acetic acid, 8.00 yen; acetate of lime, 0.41 yen; and acetone, 15.13 yen.

PHARMACISTS MEET.—At the general meeting of the Japanese Pharmacists' Association, held on April 12, about 130 pharmacists were present.—The second general meeting of the Japan Pharmaceutical Journalists' Society was held at Kaika-ro, Tokio, last month, when about fifty members were present.

JAPANESE RESEARCH.—Recent issues of "Yakugakuzasshi" ("Journal of the Pharmaceutical Society of Japan") contain articles on the "Estimation of Table Salt" (an article for which the Government has specified a standard), by Mr. S. Ito; on "An Improved Acetometer," by Mr. F. Avido; and on "Sakuranin"—a new glucoside found on the bark of the Japanese cherry-tree *Prunus Pseudo-Cerasus* var. *Siebold*.

CELLULOID-MANUFACTURE.—The Mitsui concern in Japan is about to establish a celluloid factory with a capital of a million dollars, although at present only \$350,000 is needed. The demand for celluloid has increased within the last few years, the imports amounting to about \$500,000 annually. Hitherto there have only been two small celluloid factories in Japan. The company intends to produce artificial silk and chemical products.

PERSONAL.—A meeting to welcome Drs. Nagai and Ikeguchi on their return from a visit to Europe and the United States was held at Tokio on April 27. The learned doctors have been inspecting pharmacies and schools abroad, and the meeting was arranged by Tokio pharmacists.—Mr. E. Watanabe, formerly Director of the Dispensary of the Korean Hospital, is to open a chemical manufacturing laboratory at Seoul, which will be the first of the kind in Korea.

JAPAN PHARMACEUTICAL SOCIETY.—The annual meeting of this Association was held at Tokio University on April 11 and 12, when 190 members were present. A number of papers were read, among them being one by Mr. S. Turuta on "Tablet-making"; another by Mr. K. Sakai on "A Simple Method of Making Soda Water." Dr. K. Ikeguchi discoursed on his European and American tour, and Mr. J. Kuroda on "The Latest Developments of European and American Pharmaceutical Industry."

THE EMPEROR AND THE CHEMIST.—The Emperor of Korea gave an audience to Mr. T. Kojima, a Japanese chemist, on April 15, for the purpose of learning how drinking-water can be tested. Mr. Kojima applied various tests to water in the presence of the Emperor, who asked him a series of questions, such as "What is distilled water?" "How can one distinguish between ordinary water and distilled water?" "Is this water in the silver vessel from which I drank just now not poisonous water?" On being assured by Mr. Kojima that it was not, the Emperor said, "But the water is drawn from a well." He asked, "Which is the more wholesome—well water or distilled water?" Mr. Kojima explained the differences, and how some well waters may be dangerous to drink, while others are even more wholesome than distilled water. On this the Emperor asked Mr. Kojima to show him chemical analyses of distilled and well waters.

Legal Reports.

High Court Case.

COFFEE ESSENCE DISPUTE.

LORD SALVESEN, sitting in the Court of Session, Edinburgh, last week, heard evidence in the action by R. Paterson & Sons, coffee-essence manufacturers, Glasgow, and the individual partners thereof, against Walter Paterson, Glasgow, and Kit Coffee, Ltd., Govan, Glasgow, for damages in respect to alleged false and injurious representations. The origin of the action was explained in the *C. & D.*, February 22, p. 284. The hearing is proceeding.

Sale of Food and Drugs Acts.

MILK POWDER.

At the Mansion House Police Court on June 9, Messrs. A. Boake Roberts & Co., Ltd., Stratford, were summoned for importing separated milk from Dunkirk without marking it "Machine-skimmed milk," as required by Sec. 1 of the Sale of Food and Drugs Act, 1899. The defendants pleaded not guilty, and the prosecution said the company were technically responsible for what had been done by persons not within the jurisdiction of the Court. Mr. Beck, for the defence, said the article was milk powder unsweetened, and was not in existence as a commercial article when the Act came into force. It never occurred to defendants that this milk powder could be construed as condensed milk. The Alderman, in inflicting a fine of 5s. and three guineas costs, said he was certain defendants acted in entire and absolute innocence in the matter.

DEC. ALOES CO.

Before Mr. Chapman at the Lambeth Police Court on Thursday, June 11, Mr. W. F. Garry, chemist and druggist, 9 Tulse Hill, Brixton, London, S.W., was summoned by the Lambeth Borough Council for selling decoct. aloes co. B.P. deficient in alcohol to the extent of 64 per cent. Mr. Cyril Kirby, of Messrs. Neve, Beck & Kirby, defended on behalf of the Chemists' Defence Association. The Town Clerk having briefly stated the case for the prosecution, the inspector stated that the purchase of 4 oz. of the decoction was made by a woman acting on his behalf, a prescription being handed to the defendant at the time. The inspector handed the certificate of analysis by Dr. John Muter, the public analyst, to the Magistrate. Mr. Kirby objected to the certificate on the ground that it did not state the requirements of the British Pharmacopœia, nor did it give the proportion of the ingredients, and also only some 30 parts out of a total of 100 parts, as shown on the certificate. The Magistrate remarked that he did not know anything about the decoction, and as the prosecution was not prepared to add to the information contained in Dr. Muter's certificate, the case was adjourned for six days for the attendance of Dr. Muter, or further inquiry.

County Court Case.

HUSBAND OR WIFE AS DEBTOR.

At the Isle of Wight County Court on June 3, before Judge Gye, Mr. C. E. Moorman, chemist and druggist, late of Shanklin, sued Mrs. A. E. Blake for 34*l.* 15*s.* 7*d.*, balance of account due for goods supplied. Defendant is the wife of an undischarged bankrupt, and plaintiff stated that there had been previous accounts with Mr. Blake which had been settled. As to the account now sued for, plaintiff said he had frequently asked Mr. Blake to request Mrs. Blake to send a cheque. He did not know that he was scheduled as one of Mr. Blake's creditors in respect of the whole amount now sued for. The Judge adjourned the case for investigation of this point.

Bankruptcy Report.

Re HENRY PATTISON, Shrewsbury, Chemist and Druggist.—This debtor's statement shows gross liabilities 266*l.* 10*s.* (257*l.* expected to rank), and assets estimated to produce 103*l.* 15*s.* 9*d.*, less 9*l.* 10*s.* due for rent, leaving a deficiency of 162*l.* 14*s.* 3*d.* The alleged causes of failure are ill-health, falling off in trade during the past eight years, profits insufficient to pay expenses. The Official

Receiver in his observations states that the debtor is seventy-two years of age, and has been in business at various places in Shrewsbury for the past forty-six years. For twenty-five years he occupied premises on Castle Gates, doing 12*l.* a week, but eight years ago had to remove to 29 Meadow Place, and his trade declined to one-half. About twenty years ago he effected a composition with his creditors of 2*s.* 6*d.* in the pound, paid in cash provided by his brother for that purpose. The debtor's public examination took place last week, and in reply to Mr. Cariss he stated that he was the oldest chemist in town. He repaid the money advanced by his brother at the time of the first failure, and managed to pay his way while on Castle Gates, but with more or less of a struggle. Some of his creditors, with whom he had dealt for forty years, had been very lenient. But for that indulgence he would have had to give up business some years ago. Increasing competition in the drug trade had compelled him to reduce profits. He realised that it would have been the wisest course to give up business altogether, but he did not know what to do if he gave up the shop.—Mr. Cariss said Mr. Pattison had prepared in a very satisfactory way an account of his receipts and payments from May 1907 to the present time. The statement reflected a certain amount of credit upon debtor; it showed that he was a methodical man, and had kept his accounts, and that he had a good deal of ability in other ways besides his own particular line as a chemist and druggist.—The Registrar: That is very satisfactory. It is a most unfortunate case.—Mr. Cariss: There is nothing reflecting on Mr. Pattison; he has struggled along in spite of his years.—The examination was closed.

Deed of Arrangement.

SAMUEL CHEYNE NICHOLL, 43 Donegall Place, Belfast, Chemist.—The following are among the creditors: Ayrtton, Saunders & Kemp, Liverpool (20*l.* 10*s.*); Barron Harveys & Co., London (71*l.* 10*s.*); J. Durant, Ltd., Bristol (20*l.*); Davy Hill & Hodgkinsons, Ltd., London (17*l.* 10*s.*); Maw Son & Sons, London (28*l.* 10*s.*); Titterton & Howard, London (53*l.* 15*s.*); Wright, Layman & Umney, Ltd., London (26*l.* 10*s.*); Yardley & Co., Ltd., Stratford (18*l.*).

Gazette.

Partnerships Dissolved.

GIBSON, E. A., and MCGREGOR, J., physicians and surgeons, Porchester Terrace and Pembridge Villas, Bayswater, W., under the style of Gibson & McGregor.

MUMFORD, A. A., and WEST, R. N., physicians, Manchester, under the style of Mumford & West.

The Bankruptcy Acts, 1883 and 1890.

RECEIVING ORDER.

ROSEN, NILS GABRIEL, Weymouth Street, Portland Place, W., medical practitioner.

ADJUDICATIONS.

COUSENS, JOHN STATHER, Nottingham, chemist's manager, lately chemist.

STARTIN, JAMES, Harley Street, Cavendish Square, W., doctor of medicine.

New Companies and Company News.

SACCHARUM AND CARAMEL MANUFACTURING CO., LTD.—Capital 2,000*l.*, in 1*l.* shares. Objects: To carry on the business of brewers' chemists and merchants, suppliers of chemicals, drugs, raw materials, plant, machinery, and tools to brewers and mineral-water manufacturers, manufacturers of and dealers in sugar, caramels, and saccharum, etc. No initial public issue. Registered without articles of association. Registered office, St. Ann's Wharf, St. Ann's Row, Limehouse, E.

WHITE BROS. (LONDON), LTD.—Capital 12,000*l.*, in 1*l.* shares (4,000 preference). Objects: To adopt an agreement with E. White, J. G. White, J. A. Birch, and H. A. White for the acquisition of the business carried on by them at 354 Winchester Road, Station Road, and Pevensey Road, Forest Gate, E., Frankton Road and Goldsmith Road, Peckham, S.E., and Victoria Street, Stratford, E., as "White Bros.," and to carry on the business of brewers of ginger-beer, botanic beer, and other drinks, manufacturers of fruit-wines, cordials, and aerated waters, etc. No initial public issue. The first directors are E. White (managing director), J. G. White, J. A. Birch, and H. A. White (all permanent, subject to hold-

ing 1,000 ordinary shares each). Qualification of ordinary directors, 100 shares. Remuneration of E. White, 208*l.* per annum; of J. A. Birch and H. A. White, 156*l.* each per annum; of ordinary directors, 5*l.* per annum, divisible. Registered office, Victoria Street, Stratford, E.

C. J. HEWLETT & SON, LTD.—Capital 70,000*l.*, in 1*l.* shares. Objects: To acquire the business carried on at 35 to 42 Charlotte Street, Shoreditch, as "C. J. Hewlett & Son," and to carry on the business of druggists, manufacturing and analytical chemists, distillers, manufacturers of and dealers in toilet-preparations, disinfectants, wines, spirits, electrical, chemical, photographic, surgical, veterinary, and scientific instruments, dyewares, etc., including the working of what is known as the "Owl Drug Co." business. The first subscribers are: J. C. Hewlett, 35-42 Charlotte Street, Shoreditch, pharmaceutical chemist; E. J. Millard, 35-42 Charlotte Street, Shoreditch, pharmaceutical chemist; M. W. Stranack, 35-42 Charlotte Street, Shoreditch, chemist and druggist; E. W. Newton, Lindisfarne, Northampton Road, Croydon, electrical engineer; A. Street, 35-42 Charlotte Street, E.C., cashier; F. G. Brown, 7 Finsbury Circus, E.C., surgeon; and W. Sager, 33 Ely Place, E.C., solicitor. No initial public issue. J. C. Hewlett is permanent governing director, subject to retaining 35,000 of the shares to be allotted to him pursuant to the purchase agreement. Remuneration, 1,000*l.* per annum. [We understand that this conversion is chiefly for family reasons, and no shares will be offered outside the family and directorate.]

CLAYTON ANLINE CO., LTD.—The report for the year which ended on April 30 shows a net profit of 8,482*l.*

G. B. KENT & SONS, LTD.—The preference share transfer books will be closed from June 17 to 30 for the preparation of the half-yearly dividend at the rate of 5½ per cent. per annum.

J. LLEWELLYN & CO., LTD.—The profit-and-loss account of this Shanghai firm of wholesale chemists and druggists shows a credit balance of \$8,855, which the directors recommend should be disposed of as follows: To pay a dividend of \$6 per share on 1,200 shares, \$7,200; to carry forward to 1908 account \$1,655.

ST. ERILE, LTD.—In the Chancery Division of the High Court last week, Mr. Ward Coldridge moved for the appointment of Mr. Honey, chartered accountant, as receiver and manager of this aerated-water manufacturers' business at Exeter. He stated that the company was formed to acquire four or five other businesses of a well-known character, but had not been successful, and the debentures had fallen due. It was proposed to sell the business as a going concern. Mr. Justice Joyce said he would give leave for the business to be managed until July 15, and then he would decide whether it should be continued. If it was not a good business he would not allow the management to go on beyond that date. He gave the manager liberty to act at once.

STEPHEN SMITH & CO., LTD.—The profit and loss account for the year which ended on March 31 shows profit on trading 14,039*l.* 2*s.* 4*d.*, and the directors in their report state that the year's trading creates another record both in volume of business and in net profits. They have decided to carry 3,500*l.* to the credit of reserve account, in order to strengthen and consolidate the concern, thus bringing the amount of that account up to 8,000*l.* After paying the usual 6 per cent. dividend on the preference shares the directors recommend a dividend of 10 per cent. for the year on the ordinary shares (of which 5 per cent. has already been paid), leaving the sum of 3,183*l.* 4*s.* 3*d.* to be carried forward to the next account. Dr. S. F. Smith retires by rotation from the board, and, being eligible, offers himself for re-election at the meeting to be held at 33 and 34 Broad Street Avenue, London, E.C., on Monday, June 15, at 12 o'clock.

VIROL, LTD.—At the general meeting of this company, held at the Holborn Restaurant, W.C., on June 10, Mr. Bertram S. Strauss, M.P., presiding, the report and accounts for the year (see C. & D., June 6, p. 861) were adopted after some criticism from Mr. George Edwardes, who said that the so-called gross profit of 19,496*l.* was not really profit at all, since 15,612*l.* spent on advertising during the year had not been charged to revenue account, but was added to the advertising account. Thus, although 13,000*l.* was written off, the net result to that account was an increase of 2,612*l.* He made certain proposals, including writing down part of the capital of the company to half, and that Bovril, Ltd., should be induced to consent to the extinction of 10,000*l.* of the 20,000*l.* debentures held by that company in Virol, Ltd., adding that Bovril, Ltd., was securing all the benefit of the profits earned on the manufacture and sale of Virol. The chairman said these suggestions would have the careful consideration of the board. He had great hopes of the company's future. The directors believed success would be achieved earlier than some of the shareholders anticipated.

BOOTS CASH CHEMISTS (EASTERN).—Mr. Jesse Boot presided at the general meeting of the shareholders held at 29 Farringdon Road, E.C. on June 10, and in the course of his remarks

in moving the adoption of the directors' report said: "The trade name of our business—that is, 'Boots Cash Chemists'—becomes more and more a household term from year to year. To-day we are more firmly established than ever in the favour of the public," which utterance he proceeded to substantiate by commenting upon the figures for the year (see *C. & D.*, June 6, p. 861). Alderman James Duckworth, M.P., in seconding the motion, said the business was well established, and they had got the confidence of the public who did business with them. The resolution was carried unanimously. Mr. John Gibbs proposed the re-election of Alderman J. Duckworth as a director, which Mr. E. S. Waring seconded, and the motion was unanimously agreed to. Messrs. Sharp, Parsons & Co. were re-elected auditors. Mr. Parsons, in acknowledging the re-election, spoke about the causes for the company's prosperity, giving as reasons: (1) Boots Cash Chemists had become a household word, not only in London, but throughout the country, that they supplied not only goods that were wanted by the public, but that they were of good quality, (2) that they catered for all classes, and (3) that all the members of their staff were capable people, and capable of carrying on the work with advantage. He proposed a vote of thanks to Mr. Boot, which was carried unanimously.

A. J. WHITE, LTD.—The eleventh annual general meeting of the shareholders in this company was held on June 11 at the Memorial Hall, Farringdon Street, London, E.C. In the absence of Mr. Leonard Fawell, J.P. (chairman of directors), the chair was occupied by Mr. J. Taylor Marsh. The report of the directors was summarised in the *C. & D.*, June 6, p. 861. The Chairman pointed out that the profits of the company showed an improvement of 5,600% compared with the previous year, a fact which the directors regarded as satisfactory, especially in view of the experience of most trading companies during the same period. The Chairman proposed the adoption of the annual report of the directors and of the accounts. This was seconded by Mr. Molyneux. Mr. Rigden, in criticising the report, said that the position of the company was 8,000% worse than it was nine years ago. It would be well to all classes of shareholders, he thought, if the directors could give them some information as to what their future policy would be in regard to the writing down of the over-stated assets of the company. It could hardly be asserted that the goodwill and trade-marks of the company were worth the enormous amount of 14,000%. Another shareholder suggested that the preference shareholders should be content with 5 per cent. instead of the 6 per cent. they had received for a number of years. The Chairman, replying to Mr. Rigden, said the best reserve for such a company was a vigorous advertising policy. The dividend on the ordinary shares of 1½ per cent. was agreed to, and the meeting ended with votes of thanks to the Chairman.

Births.

BOWN.—At Victoria Pharmacy, Southsea, on June 4, the wife of W. H. Bown, chemist and druggist, of a son.

WOODHOUSE.—At St. Julian's Avenue, Ludlow, on June 8, the wife of Wildish M. Woodhouse, chemist and druggist, of a son.

Marriages.

MOORE—HOLLAND.—At St. Michael's Church, New York, U.S.A., on June 1, by the Rev. Burden H. Lee, Thomas Henry Moore, pharmaceutical chemist, formerly of Grimsby, Lincolnshire, to Eva St. Clair Holland, Falkirk, Scotland.

PRESTON—LARKIN.—At St. Mary's, Priory Road, Hampstead, on June 10, by the Rev. C. B. Bartlett, Vicar of All Saints', Brighton, assisted by the Rev. H. E. Noyes, D.D., the Vicar, Ronald Holt, eldest son of Lieut.-Col. Alfred Charles Preston, V.D., of 117 Broadhurst Gardens, West Hampstead, and 81 Bishopsgate Without, E., to Eveleen Marie Larkin, second daughter of Mr. T. J. Larkin, M.L.E.E. (formerly of Japan), of 123 Broadhurst Gardens, and Beltinge, Herne Bay.

Deaths.

EVANS.—At Davos, Switzerland, recently, Mr. Evan Evans, chemist and druggist, Wrexham, aged twenty-nine. Mr. Evans had gone to Davos on his annual holiday, and he died very suddenly on his arrival there.

HOLSTEAD.—At 11 Vema Street, Daubhill, Bolton, on June 8, Ann, the widow of Mr. Thos. Holstead, chemist and druggist, Daubhill, aged seventy-eight.

JENKINS.—At Kenfig, Pyle, on June 7, Mr. David Jenkins, chemist and druggist, late of Bridgend, Glamorganshire, aged sixty-one.

OKE.—On June 3, from heart failure, following pneumonia and septic poisoning, Mr. J. W. Oke, for many years assistant to Mr. L. H. Fellow, chemist and druggist, The Square, Holsworthy, aged forty-six.

SANDEMAN.—At 14 Forfar Road, Dundee, on June 4, Eliza Walker Philip, widow of Patrick Sandeman, chemist and druggist, aged sixty-four.

Recent Wills.

MR. JOHN COTTON, chemist and druggist, St. Helens, Lancs, left estate valued at 2,035*l.* 18*s.* gross.

MR. WILLIAM WILBERFORCE TRICK, chemist, Neath, Glamorgan, left estate valued at 45*l.*

MR. FRANK WILLIAM LYALL, of Stevenston, N.B., chemist, who died on February 14 last, left personal estate valued at 3,042*l.* 2*s.* 4*d.*

MR. THOMAS EUSTACE MARRIOTT, homœopathic chemist, Leamington, left estate of the gross value of 1,514*l.* 10*s.* 2*d.* and 100*l.* 6*s.* 5*d.* net.

MR. WILLIAM NORRIS, chemist and druggist, Bradford-on-Avon, Wilts, who died March 10, left estate valued at 867*l.* 15*s.* 11*d.* gross and 650*l.* 16*s.* 6*d.* net.

MR. BENJAMIN JOHN WILKINSON, of 7 Middleton Road, Kingsland, London, N., chemist and druggist, who died on April 15, left estate valued at 5,404*l.* 5*s.* 5*d.* gross and 4,646*l.* 0*s.* 6*d.* net.

THE LATE JOHN CAMPBELL WHITE, first Baron Overton, left personal estate valued at 689,022*l.* 12*s.* 1*d.*, including interest in the firm of John & James White, chemical manufacturers, of the total value of 106,146*l.*

MR. FRANK HENLEY LEEDS, F.I.C., F.C.S., of West Allington, Bridport, Dorset, who died on April 30, left estate of the gross value of 5,789*l.* 17*s.* 1*d.* and 5,716*l.* 3*s.* 7*d.* net. His widow, Mrs. Katharine Clara Leeds, receives the whole of the estate absolutely.

MR. A. J. BALMANN SQUIRE, M.B., 24 Weymouth Street, Portland Place, W., left estate of the gross value of 32,079*l.* and 31,856*l.* net. Amongst his bequests were 2,500*l.* to the Royal Society for the Prevention of Cruelty to Animals, 1,000*l.* to the National Anti-Vivisection Society, and 500*l.* to the London Anti-Vivisection Society.

MR. DAVID WILLIAM GREENHOUGH, of 43 St. Mildred's Road, Lee, Kent, formerly of 29 Rood Lane, E.C., senior partner in the firm of Messrs. D. W. Greenhough & Son, chemical brokers, of 21 Mincing Lane, E.C., a member of the Turners' Company, who died on April 29, aged seventy-nine, left estate of the gross value of 10,105*l.*, with net personalty 10,014*l.*

PROBATE of the will, dated February 28, 1906, of Mr. Paul Lawrence Huskisson, of 12 Belsize Avenue, Hampstead, N.W., F.I.C., formerly manufacturing chemist, of the firm of Messrs. H. O. Huskisson & Co., of 74 Swinton Street, W.C., who died on April 12, aged forty-four, son of Mr. Henry Owen Huskisson, pharmaceutical chemist, leaving estate valued at 15,117*l.* 1*s.* gross, with net personalty 14,803*l.* 6*s.* 10*d.*, has been granted to his widow, Mrs. Monica Huskisson, of 9 Linden Gardens, Bayswater, to whom the testator left all of his property absolutely.

MR. HENRY BOLLMAN CONDY, of The Lees, Folkestone, patentee of "Condy's Fluid," who died on September 24, 1907, aged eighty-one years, left estate valued at 10,623*l.* 10*s.* 1*d.* gross, including 9,638*l.* 10*s.* 11*d.* in net personalty. The executrix and executors of Mr. Condy's will are his daughter, Elizabeth Jane, his sons Henry John Bollman Condy, of Putney, manufacturing chemist, and George Horace Condy, of 5 Paper Buildings, barrister, his nephew George Arthur Gardner, of New Wandsworth, and William Webb, of 3 Devonshire Square, solicitor. From his holding of 455 shares in Condy & Mitchell, Ltd., he bequeathed to his daughter Elizabeth Jane the income of 150 shares; to his son George Horace the income of 100 shares, and his son Charles Eric the income from 100 shares, and to his son Henry John absolutely twenty-four shares. He bequeathed to his brother Richard a life annuity of 80*l.*, and he left fifty-six shares of Condy & Mitchell in trust to secure 100*l.* a year for life to his daughter Elizabeth Jane, and twenty-five shares in trust to secure 50*l.* a year to Mrs. Halcrow. He left the residue of his property in trust for his daughter Elizabeth Jane and his sons George Horace and Charles Eric, and made it a condition of his bequest of shares to his son Henry John that he should not take more than 200*l.* a year as a director of Condy & Mitchell, Ltd.

Personalities.

MR. W. POOLE, pharmaceutical chemist, has been elected a trustee of the Marsh Lands, Newcastle-under-Lyme.

SIR JOHN BRUNNER, BART., M.P., is to receive the honorary degree of doctor of laws from the Liverpool University.

MR. R. H. HARLAND, F.I.C., of 37 Lombard Street, E.C., has been appointed the public analyst to the Borough Council of Greenwich.

MR. C. H. VINCE, son of Mr. J. Vince, chemist and druggist, Cheapside, Lancaster, has been appointed assistant superintendent of surveys by the Ceylon Government.

MR. A. H. MASTERS, late manager of Messrs. Lynch & Co.'s sundries department, is now filling a similar position with the Galen Manufacturing Co., Ltd., Wilson Street, New Cross Road, London, S.E.

At a meeting of the Malden and Coombe Urban District Council on Tuesday, a letter was read from Mr. P. G. W. Typke, F.I.C., F.C.S., intimating that he would be compelled to resign his seat on the Council owing to ill-health. The resignation was accepted with regret.

THIS snapshot photograph of Mr. Charles W. White, the well-known drug-trade representative in India, was taken by Mr. William Moore, Ph.C., just before Mr. White stepped on board the P. & O. s.s. *Caledonia* on his embarkation for England early last month. The bouquets and garlands brought by grateful friends of Mr. and Mrs. White were very numerous, and the photograph shows how a pair of these were disposed of.

MR. THOMAS H. MOORE, pharmaceutical chemist, formerly of

Grimsby, Lincolnshire, and manager of Messrs. Burroughs Wellcome & Co.'s New York establishment, whose marriage is announced in this issue, has been associated with the firm for many years, and was previously to the opening of the New York branch in their employ as manager of their house in Cape Town. The staff's good wishes to Mr. and Mrs. Moore took the form of a silver tea service.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

MR. S. W. WALLIS, pharmaceutical chemist, has opened a new pharmacy at Southbourne Grove, Bournemouth.

MR. J. W. STEWARD, pharmaceutical chemist, 42 High Street, Bridgnorth, has sold his branch shop at Gorleston-on-Sea to Mr. J. Berlin.

MR. C. SANGSTER, chemist and druggist, of Chester, has purchased the business of Mr. W. Dawson, chemist and druggist, Slough, Bucks.

MR. E. LOUGHLIN, chemist and druggist, has purchased the business of Mr. W. Gouldin, chemist and druggist, at Upwell, near Wisbech.

MR. CHAS. H. HACKING, Ph.C., formerly manager of Boots' Blackburn Branch, has purchased the business of Mr. Joseph Hindle, 76 Copy Nook, Blackburn.

THE business carried on as Scott's Drug Stores, 69 Mill Lane, West Hampstead, has been purchased by Dr. Scott, Buckingham Palace Road, London, S.W.

MR. CHAS. BROOKS, chemist and druggist, of 4 Northumberland Avenue, and Kingsway, London, W.C., is opening a new pharmacy at 36 Cranbourn Street, W.C.

MESSRS. J. & R. MCCracken, 38 Queen Street, Cannon Street, London, E.C., are removing on June 20, owing to expiration of lease, to a floor of the fine new building at 10 Bush Lane, Cannon Street, London, E.C.

Trade Notes.

OOWANA SOAP was placed in the Royal Pavilion for the use of King Edward and the President of the French Republic when they visited the Franco-British Exhibition.

MESSRS. ALLEN & HANBURY, LTD., announce that their manufacturing and wholesale establishments will be closed for stocktaking from June 26 to June 30 inclusive, and that small urgent orders only can be executed during that period.

MESSRS. BURROUGHS WELLCOME & Co. have an exhibit comprising a comprehensive display of modern medical equipments for missionaries at the "Orient in London." The stand is of Indian design decorated in white on a teakwood background, and several medicine chests of historical interest are shown.

MESSRS. CHAS. ZIMMERMANN & Co., of 9 St. Mary-at-Hill, London, E.C., now supply "Para Lysol Tablets," in which form the germicidal and antiseptic properties of lysol are available in solid form. The tablets are composed of one part of potassium cresylate and three parts of cresol. They are put in strong amber glass tubes, closed with a neat metal cap, and enclosed in cartons designed for counter display. The selling price is 6d. per tube. A tablet dissolved in half a tumbler of water forms an approximately 1 per cent. solution. Bacteriological tests by Dr. A. Nieter show that in bouillon cultures this strength of antiseptic solution kills *B. Typhosus*, streptococci, diphtheria and cholera organisms in one minute, *B. Pyocyaneus* in two minutes, while the highly resistant staphylococci require five minutes.

A CAPE TOWN INTERIOR.



The reproduction above indicates once again that South African pharmacies compare very favourably with those of this country, so far as appearance at least is concerned. The illustration is from a photograph of the interior of St. Mary's Dispensary, Roeland Street, Cape Town, owned by Mr. W. Fick. The fittings are handsome and solid, everything is complete, smart, and up-to-date, and the appearance augurs well for the success of the proprietor and the status of pharmacy in the Cape Colony.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE monthly meeting of the Council was held on June 3 at 67 Lower Mount Street, Dublin. The President (Mr. John Smith) presided, and the other members of Council who attended were Messrs. Thomas Batt, Vincent Johnston, W. F. Wells, Dr. Walsh, George D. Beggs, David Watson, James Michie, J. H. Bowden, P. N. White, and Dr. Whitla.

POISONS AND PHARMACY BILL.

The PRESIDENT reported the outcome of a second visit which he and Mr. Wells had paid to London in relation to the Poisons and Pharmacy Bill which is now before Parliament. The Bill had been amended by a Joint Committee, by whom it had been sent to the House of Lords, and he and his colleague had felt it necessary to be there in order to watch the interests of their licentiates and to endeavour to procure amendments in accordance with their views. The Joint Committee were not unanimously in favour of including Ireland in the Bill.

A discussion on the subject of the Bill then took place in committee, with the result that the Council decided to leave the matter in the hands of the Law Committee, with power to take whatever action they should find to be necessary in reference to the Bill, which comes again before the House of Lords on June 22.

NEW PRELIMINARY REGULATION.

On receipt of a letter from the Irish Privy Council in reference to a proposed new regulation as to the acceptance of the Preliminary examinations of other bodies,

The PRESIDENT moved the following resolution:

That the regulation dealing with the acceptance of Preliminary examinations held by other bodies ("Calendar," 1908, p. 70, last paragraph) be rescinded, and the following substituted therefor:

The following examinations are also accepted:

The Matriculation or Preliminary examination of the University of Dublin, Public Entrance examination (large certificate);

The Royal University of Ireland Matriculation examination;

The Royal Colleges of Physicians and Surgeons, Ireland, Preliminary examination;

The Intermediate Education Board for Ireland, Junior, Middle, or Senior Grade examinations in the following subjects: English, Latin, arithmetic, algebra, geometry, and one of the following subjects: Greek or a modern language;

or such other examination as shall be deemed by the Pharmaceutical Council as equivalent thereto, all the subjects having been passed at one time. Any such examination to be passed prior to the statutory service at pharmacy, *unless such service has been commenced before January 1, 1907.* The usual fee of two guineas to be paid."

Mr. BEGGS seconded the motion, which was unanimously agreed to.

DONATIONS.

Donations were received from the Medical and Pharmacy Council of the Orange River Colony of a copy of their Register for 1903, and from THE CHEMIST AND DRUGGIST of a copy of the eighth edition of the "Art of Dispensing."

On the motion of Mr. WELLS, seconded by Mr. BEGGS, thanks were voted to the donors.

Reports from the Law and House Committees were disposed of.

NEW MEMBERS.

The following gentlemen were nominated for membership of the Society: Mr. James Barry, Buttevant, co. Cork; Mr. George A. C. Scott, Portrush, co. Antrim; Dr. R. M. Bronte, Harcourt Street, Dublin; and Mr. H. P. Heney, 132 Upper Rathmines, co. Dublin.

Other business having been disposed of, the Council adjourned.

THE ANTI-OPIMUM CURE.—The Hague correspondent of the "Daily Telegraph" states that the Dutch Colonial authorities, in order to suppress the opium habit, meditate extensive experiments with the Malayan anti-opium plant, *Combretum sundaicum*.

Association Affairs.

Aberdeen Pharmaceutical Association.

THE usual quarterly meeting was held in the Governors' Room of Robert Gordon College on Wednesday evening, June 3, Mr. Robert Leslie (Vice-President) in the chair. Letters were read from the Hon. Secretaries of the British Pharmaceutical Conference and from the Hon. Secretary of the Federation of Local Associations. Delegates were appointed to represent the Association at the forthcoming meetings of the British Pharmaceutical Conference at Aberdeen in September. Mr. David Anderson reported that the publication of selections from the "B.P. Codex" was completed, and that copies had been sent to all the medical practitioners in the city and also to members of the Aberdeen Medico-Chirurgical Society resident in Scotland. There is evidence that the efforts of the Association are meeting with success in the response of the medical men prescribing the preparations the formulas for which have been reprinted in this form.

Edinburgh Chemists' Trade Association.

THE annual meeting of this Association was held at 36 York Place, Edinburgh, on June 5. Mr. C. F. Henry (Chairman of the Association) presided.

THE POISON SCHEDULE.—The Secretary intimated the receipt of a letter from Mr. Bremridge thanking the Association for their valuable suggestions as to the Poison Schedule and stating that these proposals had been remitted to the Parliamentary and General Purposes Committee.

APPRENTICE BUREAU.—The Chairman reported, with reference to the proposed Edinburgh Employment Bureau for giving information and advice to senior scholars as to apprenticeship, etc., that the Edinburgh School Board had decided to ask the various bodies represented at the recent conference to send delegates to a committee to be empowered to carry out the scheme. The Edinburgh Chemists' Trade Association was named in the list. The Chairman added that he did not think they would get apprentices from the ordinary Board schools, but from the secondary schools under the control of the Board. It might tend to lessen their difficulty in procuring apprentices if by this means they succeeded in spreading information among parents and pupils.

ANNUAL REPORT.—Mr. G. H. C. Rowland (Secretary) then submitted the annual report, from which it appeared that the membership remains at ninety-seven. He reviewed the doings of the Association during the year, which was a record of useful work. Mr. R. L. Hendry (Treasurer) gave in a financial statement showing that there is a balance of 50*l.* 12*s.* 10*d.* to the credit of the Association, or 2*l.* 8*s.* 7*d.* more than at the corresponding period of last year. Mr. Clark moved, and Mr. Lunan seconded, the adoption of the report and financial statement, which was agreed to, and Mr. Rowland and Mr. Hendry were thanked for their services. On the motion of the Chairman, seconded by Mr. McCutcheon, the meeting agreed to vote 2*l.* 2*s.* to the Benevolent Fund and 1*l.* 1*s.* to the Orphan Fund of the Pharmaceutical Society as a slight acknowledgment of the privilege of holding their meetings in the Society's house.

POISONS AND PHARMACY BILL.—The meeting then discussed in private the crisis created by the action of the Joint Committee on the Government Poisons and Pharmacy Bill. On resuming, the following resolution, moved by the Chairman and seconded by Mr. McCutcheon, was adopted:

That this meeting of the Edinburgh District Chemists' Trade Association unanimously resolve to use every endeavour to defeat the retrograde proposals of the Poisons and Pharmacy Bill, both in regard to the licensing of unqualified poison vendors and the turning of statutory professional titles into mere trading designations. This Association further declare that these two proposals constitute insuperable objections on which no compromise is possible.

ELECTION OF OFFICERS.—The office-bearers were then elected for the ensuing year as follows: Chairman, Mr. C. A. Macpherson; Vice-Chairman, Mr. R. L. Hendry; Hon. Secretary, Mr. G. H. C. Rowland, 7 Castle Street; Hon. Assistant Secretary, Mr. Adam Duncan; Hon. Treasurer, Mr. George Somerville; members of com-

nittee, Messrs. Brindle, Clark, Currie, Glass, Heddle, Henry, McCutcheon, Reid, and T. Stephenson. The following were appointed members of the Formulary Committee: Messrs. Boa, Brindle, Clark, Glass, Henry, Lunan, Rowland, and Stephenson.

A "B.P. CODEX" SYNOPSIS.—Several of those present expressed the opinion that what many of the members wished was a short pocket synopsis of the "B.P. Codex." Mr. Stephenson stated that he had prepared such a synopsis for his own purposes, and he offered to hand over the copyright of it to the Association. This offer was remitted to the Formulary Committee to consider and report. Votes of thanks ended the meeting.

Chemists' Windows.

Contributed by "C. & D." Subscribers. The Editor will be glad to receive photographs of effective window-displays for inclusion in this section. Notes on the displays should accompany the photographs. We pay for what we use.



Mr. H. A. MARTIN, of Leicester, has the knack of effective window-display. One of this most successful (illustrated here from an excellent photograph taken by himself) is an effective introduction of Mason's coffee-essence, and it succeeded in its object. It is made up almost entirely with dummy cartons, there being only a few full bottles put in to spin out the display. The back is one of the firm's posters (by Hassall), and the two serving-maids in cardboard are supplied by the firm. On the window-glass are stuck handbills relating to footballs given away, and down each side are imitation motor-goggles and caps, with the words, "Good! it's Mason's." The price (5 $\frac{1}{2}$ d.) stuck on the window is Mr. Martin's own printing in black and white. The idea has already won a prize, so that it may truly be termed a prize window and business bringer.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.) will be esteemed.

218/73. What is "Tritaisol" and where obtainable?

218/74. Who are the makers of Bellamy's blister?

TO PREVENT SUICIDE.—Dr. A. W. Faber, of St. Louis, an anti-suicide enthusiast, has among other things hunted up an old local ordinance which restricts the sale of poisons to physicians' prescriptions. Securing the co-operation of the police department, he has caused the druggists of the city to be warned that they must observe the ordinance with scrupulous detail. This suggests the statement that during the last few years several cities and States have enacted laws restricting the sale of carbolic acid, for the purpose of lessening the number of suicides.

Scientific Progress.

Temperatures under this heading are on the Centigrade scale.

Artificial Shellac.—Among the latest patents for the preparation of a resin to replace shellac is a French one, involving the usual condensation reaction with formic aldehyde. Six parts of colophony, 3 of sandarac, and 1 of elemi are heated with $\frac{2}{3}$ part by weight of paraformaldehyde to a clear melt. The resulting resinous mass is soluble in alkalies and spirit.

Acaroid Oil.—Haensel has distilled the essential oil from gum acroides, the Australian resin obtained from the plant known locally as the "Black Boy." The yield was 0.38 per cent. of a reddish-brown oil, having an odour recalling that of tolu and Peru Balsams. Its specific gravity is 0.960; it is optically inactive, acid-value 47.6, and ester-value 37.5. About 2 per cent. of cinnamic acid was isolated from the oil, as well as some styrol. The oil is being further investigated.

Cocoa-butter Substitutes.—The extensive use of cheaper fats as substitutes for cocoa-butter in chocolate-manufacture has caused a fairly full examination of several of them to be made by Sachs. The following figures were obtained:

	M.P.	Iodine No.	Sap. value	Reichert	Sp. gr. at 100°
Cocoa butter	32-33°	33-37	198	0.30	0.8577
Dika fat	39°	5.2	244	0.42	
Tingka Wang fat	37.5°	30-31	192-196		0.892
Illipi fat	24-29°	53-60	191	0.44	0.8943
Coconut stearin	29°	4-4.5	252	3.4	0.870
Palm-nut stearin	31-32°	8	242	2.2	0.870

Mexican Poppy-seeds (*Argemone mexicana*) yield 37 per cent. of fixed oil, which David Hooper has reported upon to the "Agricultural Ledger" (1907, No. 5), and he concludes that the properties of the oil restrict it for general employment. The seeds and the oil are cathartic and emetic, 10 to 30 minims being sufficient to produce a good purge. The oil has long been used in India as an external application in cases of itch, ringworm, and skin-diseases generally, as well as for headache following exposure to the sun.

Selenium.—This metal has up to recent times been little used in the arts, but has now obtained some prominence from its employment in various forms of electrical apparatus, which utilise its peculiar property of being almost a non-conductor of electricity in the dark, while under the influence of light its conductivity is immensely increased. This characteristic has led to its use in instruments designed to light and extinguish gas buoys automatically; for guiding and exploding torpedoes by a ray of light; for telephoning along a ray of light; for transmitting sounds and photographs or other pictures to a distance by means of a telephone or telegraph wire; and for measuring Röntgen rays in therapeutic applications.

Verba Buena.—Dr. F. B. Power and A. H. Salway have communicated to the American Chemical Society ("Jour." 1908, 251) an account of a research in the Wellcome Chemical Research Laboratory of the chemical constituents of *Micro-meria Chamissonis*, an anthelmintic and emmenagogue labiate of California. The following are the constituents which they isolated:

Xanthomicrol, $C_{25}H_{40}O_4(OH)_2$, occurs in lemon-coloured needles, m.p. 225°.

Micromerol, $C_{25}H_{40}O_4(OH)_2 \cdot 2H_2O$, in colourless needles, m.p. 227°, opt. act. $[\alpha]_D +57^\circ$.

Micrometal, $C_{25}H_{40}O_4(OH)_2 \cdot 2H_2O$, in colourless needles, m.p. 294° to 296°, opt. act. $[\alpha]_D +61.4^\circ$.

Hentriacontan, $C_{31}H_{64}$, m.p. 66° to 67°.

A *Phytosterol*, $C_{27}H_{48}O \cdot H_2O$, m.p. 135°, a fatty acid, glyceride, acid, glucose, and a yellowish-brown essential oil, sp. gr. 0.9244 at 20°, and opt. rot. $[\alpha]_D -22^\circ 48'$.

Manufacture of Gun-cotton.—A correspondent of the "Times" gives the following as the process of making gun-cotton, as carried out at Waltham Abbey. The vessel used is a shallow earthenware pan, and in it 20 lb. of cotton-waste is immersed in an acid mixture. After standing for two and a half hours the conversion of the cotton-waste into gun-cotton is complete, and the waste acid is run off very slowly through an outlet at the bottom of the pan, water being at the same time carefully distributed over the surface of the acid, following without mixing with it, through the mass of the gun-cotton. This new process produces gun-cotton more easily purified by boiling and of a better stability, with the result that the cordite made from it is more stable. For the workmen it is a much healthier process, and far less destructive than the old to plant and buildings. It may be added that as regards both nitroglycerin (*C. & D.*, February 8, p. 235) and gun-cotton the improved processes have resulted in a considerable reduction in the cost of manufacture.

Observations and Reflections.

By XRAYSER.

An Unexpected Development

in the Joint Committee's deliberation on the Poisons and Pharmacy Bill was the proposal of a directors clause by Sir John Batty Tuke. We have been told so often by gentlemen who pride themselves on their practical common-sense that the House of Commons would never listen to such a proposal that it is interesting to observe that on this, the only occasion when the now abandoned clause has had an innings, out of the five members of the Lower House to whom the consideration of an amending Pharmacy Act had been specifically committed, three supported this method of reconciling company trading with the essential principle of the old Act, one was neutral, and the fifth was absent. Whether the macrocosm would endorse the view of the microcosm cannot be definitely judged; but given a fair fight and no Government intervention, there is no reason for assurance that it would not.

The Most Deadly Argument

against a directors clause now is that the chartered Society authorised to speak for pharmacists no longer officially wants it. The Bill in which the aspirations of British pharmacists are formally enshrined is in the House of Commons and is open for anyone to consult. An impartial legislator who might care to investigate would discover that we no longer think qualified proprietorship of pharmacies necessary, though it was the key of the 1868 Act. What we appear to be in real earnest about, and what we are imploring Parliament to help us to accomplish, is the enactment of a few trumpery provisions calculated to damage the interests of chemists' widows, of chemists who own branch shops, and of chemists who own old-established businesses. Add to these a curriculum, and our happiness will be complete. Not a very encouraging outlook for members of Parliament, like Sir John Batty Tuke, who still believe that an effective Pharmacy Act is desirable. Possibly, however, history may repeat itself. The Pharmaceutical Society before 1868 did not want the poisons provisions, but they were forced on it by the will of Parliament. Now it does not care to exert itself to maintain the principle of qualified proprietorship, though the conditions of pharmacy are being overturned in this country by the drug-departments of drapers, grocers, and general dealers, while under the new Companies Act any man and his wife may next month legally qualify themselves. Professional qualifications and titles, the only market value of which is what can be squeezed out of capitalistic employers, are poor things to combat for.

The Analyses of Nostrums

which have been undertaken by the "British Medical Journal," and of which twelve groups have now been published, are a more formidable attack on these much-maligned products than any Royal Commission on them, or even an Australian Legislature is likely to devise. The analyses must have been skilfully performed, for it does not appear that that any one of them has been challenged, and the reports show in most instances a singular contrast between the literary luxuriance of the labels and the poverty of invention manifested in the formulas. But it ought not to be forgotten that, after all, a considerable number of our most valued official remedies have been professedly copies of successful, and it may be supposed useful, proprietary compounds. An instance occurs in the collection reported upon in the "B.M.J."

last week. First among some preparations for the eyes is given a report on the familiar Singleton's Eye Ointment (which, by the way, I gather is no longer called "golden" eye ointment). The analysis shows what has been many times previously asserted—that this ointment contains the red oxide of mercury as its active ingredient, incorporated with a fatty base the composition of which is uncertain. This may perhaps be accepted as settled. But what is curious is

The Varying Opinions

which have been held by the highest authorities in the past. Paris, for example, in "Pharmacologia" (1832), states that "Singleton's Eye Salve or Golden Ointment consists of orpiment with lard or spermaceti ointment." It does not seem likely that Paris could have made such a mistake as to have confused mercury with arsenic if he analysed the preparation himself. If he did he made it with his eyes open, for he immediately adds that the unglycid. nit. ox. of the London College is usually sold under the name of the golden ointment. Paris's statement has often been copied, but Christison in 1842 declared that the Colleges had devised their formulas for nitrate of mercury (citrine) ointment to imitate Singleton's. This is at least evidence that Singleton's was a formidable competitor—in other words, that it cured cases in which the regular profession had failed. Redwood, in Gray's "Supplement" (1857), went one better than Paris by prescribing realgar instead of orpiment. The conclusion that some commentators have drawn from these irreconcilable statements is that Singleton made his ointment in varying ways. It is almost impossible to accept this opinion. The ointment was a very successful one, both medicinally and commercially. To have played games with it as suggested would have been simply a crazy policy. One other additional confusion may be alluded to. In 1882 Mr. Napier, of Guildford, wrote to the "Lancet," sending a copy of a Latin formula which he said was obtained about forty years before from the occupier of the house in Fleet Street, nearly opposite St. Dunstan's Church, where Mr. Singleton lived. This was to treat $\frac{1}{2}$ oz. of quicksilver with $5\frac{1}{2}$ drachms of nitric acid, and afterwards to mix the nitrate with 4 oz. of olive oil and 6 oz. of butter free from salt. Probably it was some knowledge of this formula which put the Colleges on the wrong scent.

The Daylight Experiment

which I read in "Trade Notes" is being tried by Messrs. George Curling, Wyman & Co., will be good to watch; but obviously its success or failure will not prove anything either for or against the Daylight Saving Bill. The firm named are opening and closing their place of business an hour earlier; but in an isolated case like this the staff will continually be reminded that they are starting work an hour earlier than has been their custom, and it will be the perpetually recurring appreciation of that condition that is likely to be irritating. The essential characteristic of Mr. Pearce's Bill is that if it is adopted no one will recognise after the first morning or two that any difference has occurred. The 8.15 train will start at 8.15, though it will really be 7.15; banks and shops and offices will all open their doors for business just as they do now; the luncheon hour will come at one, and the mails will have to be ready at the same time as at present. Unless things happen in this way the Bill will fail, and it is clear we could never reform our surroundings in this direction without an Act of Parliament. It would have needed centuries to have got our calendar conformed with the solar year by voluntary effort; an Act of Parliament wiped out ten days from everybody's life, with some friction it is true, but without any permanent inconvenience. The Bank Holidays Act caught the public fancy, and four new holidays a year were suddenly created—a result which a holiday association would never have accomplished. On the other hand, the Early Closing Act, which offered a daily boon to myriads of hard workers, has been disregarded. Presumably the nation was not ready for it. The Daylight Saving Bill is a cleverer scheme than any of these in that it aims to alter the conditions of our lives by means of a convenient fiction.

SEVENTEEN PERSONS were killed and many injured by an explosion at the Seiler Celluloid Factory in the Ottakring district of Vienna on June 6.

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Editorial Comments.

"Known, Admitted, and Approved."
Rhinitis Tablets (Dr. Lincoln).

POPULAR medicines associated with the names of famous prescribers have always been among the daily dealings of chemists, some being of local and others of national reputation, and there is reason to believe that the class will be more numerous in the future. A hundred years ago, when medical etiquette was less strict than it is now, and when many medical practitioners kept open shop, proprietary rights were probably established by the prescribers in medicines which they sold by retail under their own names. Instances of the kind could be quoted, both of medicines which have ceased to be and of those which are. The names of many are given in the schedule to the Medicine Stamp-duty Act of 1812, and their occurrence is sufficient reason for the Board of Inland Revenue hesitating to regard as non-proprietary any medicine which bears the name of a physician. On the other hand, there are numerous medicines which never have been proprietary, such as Dr. Gregory's Powder, Dr. Hamilton's Pills, and Liver Pills (Sir Andrew Clark), which, according to the terms of the exemption as to known, admitted, and approved remedies, are excluded until it is proved that they are not, and never have been, proprietary. The above-named medicines are examples of titles which the Board have ruled to be exempt, and several others have been added to the list this year on evidence of their non-proprietary origin. We have now to add the title given at the head of this note—"Rhinitis Tablets (Dr. Lincoln)"—in respect to which a London chemist paid a fine some weeks ago, satisfactory evidence not having at that time been available. These tablets originated with an American physician twenty years ago or more; they are in common demand in the United States, where they are made by all manufacturers of tablets, and the formula is known and published, but it is practically impossible to trace the first publication of Dr. Lincoln's prescription. We placed the facts, so far as they could be ascertained, before the Board of Inland Revenue, and in a

letter (23,978 S., 1908) dated June 3, 1908, Mr. E. E. Stoodley, Secretary, informs us that the Board are willing, on the evidence, to exempt the preparation from duty. This makes the eleventh preparation bearing a possessive case name which the Board have expressly exempted, the others being :

Bland's pills	Gregory's powder
Christison's pills	Hamilton's pills
Liver pills (Sir Andrew Clark)	Parrish's syrup
Dobell's aperient	Stokes' chest-liniment
Easton's syrup	Stokes' expectorant-mixture

There are scores of preparations on the market named in a similar manner, and this note may serve as a reminder that they are each and all liable to duty until the Board expressly exempt them.

Opium.

IN an otherwise dull week the opium market is once again the centre of attraction, owing to the reports of a more or less alarming nature emanating from Smyrna and Constantinople announcing that the spring-grown crop has been seriously damaged by drought. In the absence of confirmation these reports were received here with the usual incredulity, but it would now appear that they contain a certain amount of truth, as undoubtedly the crop has suffered from drought, the partial rains having been insufficient and too late to ensure a normal crop. It will be seen from the cable published in our Trade Report that the crop is estimated at 3,000 cases only, but reports received from other sources state that it will probably be from four to five thousand cases, as compared with the original estimate of 7,000 cases. Whatever the crop may be does not alter the fact that prices in Smyrna have advanced fully 2s. per lb. since last week, buyers for United States account having paid up to 15s. per lb. c.i.f. terms for good druggists' quality. A further advance is expected, as sellers have retired. At the present juncture there is every inducement among Smyrna holders to force up prices, owing to the fact that those who are financially strong have about 1,500 cases of old crop bought at high prices which they now expect to liquidate without loss, or with a profit, whereas if the crop had been an average a heavy loss would have ensued. As it is the weak holders, who are at the mercy of the bankers, have been mainly responsible for the gradual decline which took place from August last, when prices touched 26s. per lb. in Smyrna. The abnormal conditions last year reduced the demand to a low point, the situation being aggravated by the absence of American buying; consequently prices slowly sagged to the equivalent of about 15s. for Karahissar, which was paid for a line of fifty cases in May. Now on the eve of the new crop comes the present advance, and in view of the fact that the price of opium to-day is still abnormally high the situation is fraught with difficulty. It is impossible to say what course the market will take, but one thing is assured, that the business will again be of a hand-to-mouth character, buyers (apart from a few speculators) only entering the market for current needs. Undoubtedly stocks of the Turkey drug are extremely low in London and the United States, which factor will materially assist in the maintenance of prices. At the moment, however, abstention from buying is recommended as the best policy, for by the end of the month something definite will be known regarding the new crop, and buyers will then have more confidence in operating. The present upward movement has also brought about a fairly active demand for Persian opium. Spot prices have advanced 1s. per lb. since last week, and in view of the present situation holders are chary of selling until the position has become clearer.

A Holiday Prospect.

OCCASIONALLY in the history of the British Pharmaceutical Conference there has been open talk about its impending collapse, and no doubt there have been times when its membership and financial condition have come near to justifying rumour, but rarely has the Conference had so near an escape as in 1907. Until a very short time before the brilliant meeting in Manchester no town had definitely come forward with an invitation for 1908. Then the chemists of Aberdeen and district agreed to undertake the difficult task of following Manchester, and since then it has transpired that Newcastle-on-Tyne chemists will be the hosts of the Conference in 1909, which will mark an interval of twenty years since the second meeting in that city, the first or inaugural meeting having been held there in 1864. The Conference is peculiar among our pharmaceutical institutions. Some depend for their existence upon membership and money, others upon the energy of their officers, but the Conference adds to these reliance upon the great population centres of the three kingdoms, whose interest is especially necessary for "the promotion of friendly intercourse and union amongst pharmacists." Last year's experience gave prominence to the vital nature of local interest for the continuance of the Conference, and although three months have still to elapse before the meeting in Aberdeen under the presidency of Mr. Robert Wright, the chemists of the city and district are well forward with their arrangements for a gathering which promises to be memorable in the history of the Conference. Since the last meeting there in 1885 the city has progressed greatly in commerce, education, and government, and one of the aims of the Local Committee is to give the Conference members a lasting recollection of the visit in September. Marischal College, in which the meetings are to be held, is not the oldest of the constituent parts of the United University, but it combines antiquity of association with the most recent achievements of architectural magnificence. In our recollection the Conference has never had at its disposal so fine a place as the Mitchell Hall, where it will be at home on Tuesday, September 15, and the reception by Lord Provost Sir Alexander Lyon on the Monday evening is to be in the Municipal Art Galleries, a fine building, that contains a remarkable collection of pictures and sculpture, which, we predict, will astonish those who have not seen this too little known palace of art. There are many other attractions in Aberdeen; perhaps its medicine and pharmacy deserve, in connection with the Conference, the attention of visitors. There the two branches of physic have always been associated, and scores of the most notable medical practitioners have learnt the rudiments of their profession in some druggist's shop in the city. A few of the pharmacies are historic, and most of them are distinguished by being what all pharmacies should be—places where physicians' prescriptions form the backbone of the business, yet without external pretentious display. This may account for the local interest in the work of the Conference, which most of the chemists are showing. They have entrusted the arrangements to a Business Committee, which comprises Mr. William Giles (Chairman), Provost Alexander, of Banff (Vice-Chairman), Mr. A. Craig, jun. (Treasurer), Mr. W. F. Hay (Secretary), Mr. James Patterson (Hon. Secretary), Mr. J. R. Reith, of Culter (Convener of Excursions Committee), Mr. David Anderson (Convener of Entertainments Committee), and Messrs. J. F. Tocher, B.Sc., A. Leslie Bruce, Robert Leslie, and A. Mackie. The Aberdeen Pharmaceutical Association is, of course, through its President (Mr. James Spence) and members actively participating in the arrangements. It may be remembered that

this Association is the oldest pharmaceutical body in Great Britain, having been founded in 1839, and its records are continuous since then, although its name has been altered on two occasions. There is a tradition that when Jacob Bell visited the city in the 'fifties it was suggested to him that absorption of the Association by the Society would not be as appropriate as the reverse, but the Aberdeen minute books are silent on the point. We understand that the Conference programme of addresses and papers promises well. The day following the conclusion of the meeting is to be devoted to an excursion by Deeside and past Balmoral to Braemar. At that time of the year the country is at its best. The scenery is unexcelled, and we have the custom of royalty to prove that the time of the visit is the most suitable for securing the recuperation which is the best beginning to the winter's work.

Foreign Trade in May.

THE Board of Trade returns for May again show decreased values in the overseas trade of the United Kingdom. The imports for the month record a decline of 8,344,000*l.*, or 15.9 per cent., while the exports have decreased by 5,856,000*l.*, or 15.8 per cent. For the first five months of the year the decrease in imports now amounts to 28,356,000*l.*, or 10.1 per cent., and that in exports to 12,166,000*l.*, or 7 per cent., but if the comparison be carried back to 1906 (previous to the "boom") there is an actual increase of over 6½ millions on the total trade of the country. The imports for May were valued at 44,271,217*l.*, exports of British goods at 31,066,877*l.*, and re-exports at 6,431,654*l.*, making a total turnover of 81,769,748*l.* The decrease in imports last month was general and included 2,477,600*l.* in manufactured articles, 2,531,500*l.* in raw materials, and 2,084,000*l.* in food. Chemicals and drugs were less by 279,325*l.*, imports being valued at 843,712*l.*, and the decline was spread over practically all items. The heaviest reduction was 139,600*l.* in unenumerated chemicals. In unenumerated drugs and medicines the decline was 28,000*l.*, and painters' colours were 44,000*l.* less. Only 16,470 oz. of quinine and quinine salts was imported in May, a drop of 100,038 oz. (3,548*l.*) as compared with last year, but as compared with 1906 the decline is 297,130 oz.; for the five completed months we have imported only 363,214 oz., a reduction of 1,127,557 oz. on last year's figures. These figures well illustrate to what extent the trade in quinine has shrunk. In British exports the decline was entirely in manufactured goods—5,935,463*l.*, of which 77,636*l.* represented the amount by which chemicals and allied goods fell away. The chief items of decrease in this section comprised 1,622,520*l.* for cotton, 787,249*l.* for new ships, and 771,479*l.* for iron and steel. In raw materials there was an increase of 96,000*l.*, coal alone being 350,154*l.* more in aggregate value exported, while food and drink was 12,700*l.* more. The above decline of 77,636*l.* in chemicals and drugs on a total of 1,460,103*l.* is not unfavourable when compared with other industries, especially that section relating to the export of drugs and medicines, the figures for which we give below:

	1908	1907	1906
May ...	£134,976	£170,694	£139,429
Jan.-May ...	643,763	740,178	648,662

Certainly the figures relating to heavy chemicals indicate dull trade all round, practically all the leading products exhibiting a shrinkage, and according to all accounts May was a poor month in this branch. The Board of Trade has also issued a statement regarding alterations in values during the past decade, and this shows that the cheapness of goods now prevailing accounts for much of the decrease in imports and exports, which is a universal and not merely a British condition.

Patents and Trade-marks.

THE annual report of the Comptroller-General of Patents, Designs, and Trade-marks for 1907 has been published this week. The number of applications for patents during 1907 was 29,040, which is smaller than in the previous year (30,030), but the patents sealed were 16,272, a larger number than any previous year. The number of trade-mark applications was 10,796, against 11,414 in 1906, but the marks registered totalled 6,255, against 4,731 in 1906, which was within a few of the record year (1887); 24,039 designs were registered in 1907. The receipts from patents fees were 265,012*l.*, as compared with 255,646*l.* in 1906, an increase of 9,366*l.*; from designs fees 5,473*l.*, as compared with 4,344*l.*, an increase of 1,129*l.*; and from trade-marks fees 18,447*l.*, against 15,559*l.*, an increase of 2,888*l.* The increase in trade-marks fees is due partly to the revised scale of fees which came into operation in the course of the previous year, and partly to the large increase in the number of trade-marks registered. The surplus of income over expenditure during 1907 was 124,158*l.* 12*s.* The Comptroller gives an interesting summary of the requirements of the Patents and Designs Act, 1907, and states that a notice pointing out the effect of the amendments has been sent out to nearly 70,000 patentees, whose patents are in force in this country. A special note is given about the method that has been adopted for checking applications for speculative patents based only on chemical theories, the Comptroller being empowered to ask for typical samples and specimens of the alleged inventions. These matters have been dealt with in a complete manner in *THE CHEMIST AND DRUGGIST* and *The Chemists' and Druggists' Diary*, but it is as well to remember that the reforms in the law relating to patents and designs are of a very substantial character, and are calculated to put a stop to the abuse of the Patents Act, which had become so noticeable of late years. A note is given in the report of the progress in each of the 146 classes of invention, and it is stated that the classes "Acids, alkalies, etc.," and "Acids and salts, organic, etc.," have shown large increases. In the appendices to the report statistics are given on a variety of matters concerning patents and trade-marks. From one of these we gather that the number of patents granted in the sections "Medicine, etc.," and "Photography" has been practically the same for the last few years. It is noticeable that the trade-marks in the three classes of chemical substances show a substantial increase in number.

Dec. Aloes Co.

The second prosecution in the course of the last fortnight for deficiency in alcoholic strength and extractive matter of this preparation took place on June 11 (p. 891) at the Lambeth Police Court. In the first case (*C. & D.*, May 23, p. 799) the deficiency was 55 per cent. in alcohol and extractive. We learn that further samples are to be taken, and wish to warn chemists in regard to the preparation. The usual strength of dec. aloes co. conc. is 1 to 3, but as this would require an alcoholic strength of about 72 per cent. and approximately 20 per cent. or more of total solids, it is not possible to make such a preparation without the addition of alcohol in diluting. Mr. R. A. Cripps, in his paper read to the British Pharmaceutical Conference at Brighton in 1905, showed it is barely possible to make a 1-in-2 preparation.

The Malay Anti-Opium Plant.

This plant (*Combretum sundaicum*) is now in abundance on the English market, and the history of the discovery is given by Mr. Wray in the "Kew Bulletin" as follows:

"A party of Chinese wood-cutters working in the jungle near Seremban, in Negri Sembilan, ran out of tea, and to supply its place took the leaves of a jungle climber, dried them, and made an infusion in the ordinary way. This, however, was not successful, as the beverage made the men ill with 'sakit perut'—i.e., bowel complaint. The leaves were then roasted, and a fair substitute for tea was obtained which had no ill effects. Then, for some obscure reason, 'tengo,' opium-dross, or the refuse opium after being smoked was mixed with it, and the men continued drinking the mixture for a week or so in the place of tea. After this time it was found that the desire for opium-smoking had been lost, and the news was spread by their friends."

Biak—an Opium Substitute.

The "Kew Bulletin" just issued corrects the inclusion among anti-opium plants of *Metragyne speciosa* in the issue of 1907, p. 199. It states also that Mr. Wray, in the "Journal of the Federated Malay States Museum," calls attention to the mistake, and gives an account of biak (*Metragyne speciosa*). The leaves of this indigenous tree are reported to be used in Malaya, especially the northern States, as an opium-substitute. The drug, according to Mr. Wray, is prepared in two ways. In the first method the leaves, after picking, are dried until crisp, and then rubbed to powder between the hands, the fibrous tissue being thus separated. The dose of the powder is about $2\frac{1}{4}$ dr. mixed with water or made into an infusion with hot water and taken like tea. It is usually taken twice a day, before meals. The second method of preparation resembles that of catechu: a decoction of the leaves is strained and evaporated to a syrupy consistence. The dose of the extract, called *chandru*, in hot water is said to be one *hun*, approximately 6 grains. The extract is also smoked, somewhat in the same way as opium. The pipe for this purpose is of bamboo, about 14 in. long by $\frac{7}{8}$ in. in diameter, with one end closed by the natural septum, with a brass tube $1\frac{3}{8}$ in. long of $\frac{1}{4}$ -in. bore inserted near the closed end. An opium-pipe of the Patani pattern is almost exactly similar to the above. For smoking, the extract is mixed intimately with the finely shredded leaves of the *Palas* palm, the sticky, fibrous, brown mass being known as *madat*. The smoker sits tailorwise on the floor with a lamp in front of him, and forms a small portion of *madat* into a pellet, which he inserts into the pipe. Applying his mouth to the other end of the tube, he brings the *madat* into contact with a flame, and inhales the smoke of the burning pellet through the pipe. From twenty to thirty pellets are smoked at a time. The effects of the drug, taken internally or inhaled, are said to resemble those of opium in producing stupor, and in large doses it is poisonous. Up to the present time no poisonous alkaloid has been obtained from the plant.

Asafetida.

An interesting account of the collection of asafetida is given in the recently published volumes of the "Baluchistan Gazetteer." The plants grow in Karan in the Raskoli Hills, between the Jalwar and Tatajar passes and the Bunep river. They are also found in considerable quantities in the Chagai district, the principal localities being the Koh-Sultan, Amirchah, Gamichah, Sher Khan-Chah, and Groi. The resin is specially plentiful after good winter rains. The collectors in Chagai are usually Barbar Afghans from the Jhob district, who arrive during April and May and stay for the greater part of the summer. In Karan nomad Ghilizi-Afghans are the collectors, and pay a tax to the chief for the privilege. They divide themselves into groups of ten persons each and allot positions to each group. There is a male and female plant which are known as

"kular hing" and "panni hing" respectively, the distinction being that the former has a large flower of a light straw colour, while the latter has none. The plant is protected from the sun by a small hut made of stones, and when it begins to ripen an incision is made in the stem, and the sap or juice which exudes is collected in skins and dried in the sun. Fresh incisions are made at intervals, and each plant is able to give three or four collections. It is estimated that the asafetida produced from one stalk usually amounts to about 1 lb., but the size of the plants varies and the juice accordingly ranges from 2 oz. or 3 oz. to 2 lb. The first juice that exudes is considered to be of superior quality. The price of the drug in the Quetta bazaar varies from Rs. 20 to Rs. 100 per maund. In the Bombay market asafetida is of two kinds, called "hingra" and "hing." "Hingra" arrives from Persia and Afghanistan, and is obtained from *Ferula fatida*; this is the kind usually supplied to Europe and America. The other kind is called "hing" or "Abushaheri hing," and is obtained from *Ferula alliacea*. This is not exported, but is used in India for edible and medicinal purposes. Of all the asafetida imported into Bombay only about 5 per cent. is exported to foreign countries, showing that there is a considerable demand for this article in all parts of India.

Adulterated Gentian Powder.

By G. W. MARRIS, Ph.C.

ALTHOUGH commercial specimens of foreign-ground drugs are now less frequently than formerly found adulterated with olive or almond "shell" powder, they are still occasionally of very inferior quality. In the course of my investigations at the laboratories of Messrs. Evans Sons Lescher & Webb, I have discovered recently an abnormal proportion of woody matter in two samples of gentian powder from the Continent. In one case the admixture had the appearance of quassia (probably exhausted). The source of the impurity in the second case is uncertain. It consisted, to a great extent, of fibrous wood cells crossed by medullary rays three or four cells wide. Fortunately, the colour of the adulterated drug is paler than that of English-ground samples, and naturally the taste and aroma are correspondingly weaker. A very cursory microscopical examination is sufficient to detect the admixture.

APHORISMS.

By BRUCE LOGAN.

RETAIL chemists never grow fat!
A wise assistant laughs with the boss!
Chemists make cachets; stores make cash!
The course of pure pharmacy never runs smooth!
You can't judge a pill by its coat!
Profits and patents are soon parted!
The school of experience is open to all, but there are no free scholarships.
Necessity may be the mother of invention, but originality is the father of success.
Time flies; a pill often does the same. Moral: Keep your hand on the edge of the machine.
The road to success is built on other men's failures!
Laugh, and the world laughs with you; but don't forget the man with toothache who waits.
There are two B.P.s to study. The one you know by heart; your ability to understand the other marks your progress in life.
Never joke with a man who has a corn!
The chemist's motto, "Live and help to live!"

The Nadir of Temperature.

THE last Friday evening discourse of the session at the Royal Institution, on June 5, was devoted to an address by Sir James Dewar on "The Nadir of Temperature and Allied Problems." The Duke of Northumberland was in the chair, and among those present were Sir William Crookes, Sir Boverton Redwood, Professor H. E. Armstrong, Professor S. P. Thompson, and Professor J. J. Thomson. Referring to the nadir as being the opposite extreme to the zenith, Sir James Dewar mentioned that his first lecture before the Institution many years ago referred to the temperature of the sun—the zenith of temperature. Across the end of the lecture-theatre was stretched a scale of absolute temperature marked at intervals to denote various thermal facts. The nadir of temperature was at 15° absolute, that being for the present the lowest that can be commanded by means of liquid hydrogen. The early part of the lecture dealt with the means of recording temperatures—the electrical method, in which thermo junctions influence a galvanometer, being the one found to be trustworthy at low temperatures. It was shown experimentally that by exhausting a tube of liquid hydrogen the temperature is suddenly lowered, so that solid hydrogen is formed, producing the nadir of temperature. It is difficult, said the lecturer, to appreciate what is meant by such a low temperature as 15° . It is a fifteenth that of the lecture-theatre, which in turn is a fifteenth lower than solar temperature, $4,500^{\circ}$. The spheroidal state assumed by water dropped on a red-hot plate is reproduced by putting a little liquid air on a liquid at the room temperature, the relative temperatures being about the same as in the former case, and also by dropping liquid hydrogen on the surface of liquid air. These were shown experimentally, and it was noted that a relatively large amount of liquid hydrogen was needed to show the spheroidal phenomenon because of the extreme volatility and small latent heat of liquid hydrogen, the last-named being only a fifth that of liquid air. The second part of the lecture dealt with the problems that arise when any attempt is made to reach a lower temperature than the nadir. One of the difficulties is radiation. To emphasise the importance of this an experiment was made to show that a vessel covered with a lead mirror was about five times less effective than a similar vessel coated with silver. Nickel is nearly as useful as silver in preventing radiation. Referring to the difficulty of isolating pure hydrogen, Sir James incidentally mentioned that very large quantities of oxygen are now made in London by the fractional evaporation of liquid air. He then illustrated the Cailletet method of obtaining low temperatures by the sudden expansion of compressed gas, and said that when an experiment of this kind is tried by expanding compressed helium from the temperature of liquid hydrogen nothing can be seen, perhaps because the very small index of refraction possessed by the gas would prevent the mist that would indicate incipient liquefaction from being visible, or perhaps because the influx of heat was too rapid to permit liquefaction at all. But if this method of sudden expansion fails, as apparently it does, would the method that succeeded with hydrogen yield better results? To carry it out enormous quantities of liquid hydrogen would have to be circulated in a regenerative coil; in consequence the expense would be very great, and a further difficulty was the expense of getting sufficient helium for the experiment. By an arrangement with the Bath Corporation the gases which are given off at the thermal springs at Bath are collected and sent up to the Royal Institution, but as these gases only contain a two-thousandth of their volume of helium the expense is enormous. There exist springs in France and gas-wells in North America which give off gases containing 2 per cent. of helium, and if, said Sir James, "I had one of these at my command the problem might be solved." The success of the regenerative method depends upon whether the critical point of helium is what we believe it to be. Olszewski suggests that helium may be an incondensable gas, and he has justly remarked that in that case to prove it so would be as great a scientific achievement as to liquefy it. However, indirect considerations, based on the amount of the gas absorbed by charcoal

at low temperatures, and on the heat evolution in charcoal for different gases, tended to confirm the conclusion reached by calculation that helium will boil at a temperature of 5° or 6° absolute. One of the final experiments was with a vacuum vessel of thin indiarubber, the rubber being quite rigid when cool. When air was introduced the vessel altered in shape, but did not break.

Medicines for Japan.

By ERNEST O. JAMES.

SINCE the cessation of hostilities with Russia, Japan has been making strenuous efforts in the development of her industrial resources, and among the many industries which have been stimulated to a degree of expansion have been those requiring in some process of their manufacture the use of chemicals of various descriptions, the imports of which have correspondingly increased. The greater portion of the supplies is drawn from Great Britain, Germany, and the United States, the value of the total yearly imports of chemicals, drugs, and medicinal preparations for the past three years being as follows: 1905, 15,448,235 yen; 1906, 15,532,198 yen; 1907, 18,832,514 yen. Among the larger quantities of chemicals and drugs imported in 1907 the following may be enumerated:

	Kin	Yen
Resin	5,382,942	350,255
Acid boric	587,040	93,084
Acid acetic	833,291	200,406
Acid tartaric	80,222	48,589
Acid carbolie	457,541	153,781
Soda caustic	17,082,191	1,171,180
Soda bicarbonate	5,300,423	245,707
Soda ash	25,369,839	818,961
Soda borate	1,008,909	98,489
Soda nitrate (crude)	9,898,559	637,213
Potash chlorate	6,133,758	1,187,076
Potash cyanide	1,019,685	364,532
Potash bichromate	933,107	177,767
Bismuth subnitrate	59,875	176,198
Ammonia sulphate	104,415,833	8,227,472
Antipyrin (oz.)	766,715	151,813
Quinine sulph. and hyd. (oz.)	329,824	107,063
Morphine sulph. and hyd. (oz.)	26,433	70,975
Cocaine sulph. and hyd. (oz.)	24,301	98,731

The imports of medicinal preparations during the same period amounted to 73,676 yen. Of the total increase in value of imports in 1907 upon those of 1906, 2,930,783 yen is attributable to crude sulphate of ammonia for fertilising purposes, leaving the net increase in value of other imported chemicals, etc., at 369,533 yen. (The kin is equivalent to 1.32 lb. avoird., and 10 yen equals approximately 14.)

Concerning the importation of chemicals and drugs to be used for commercial purposes, no regulations exist pertaining to the degree of purity of the substances imported other than that adulterated chemicals, drugs, and medicinal preparations are prohibited entry, and upon the payment of the import duty any variety or quality may be allowed entry. An exception applies to opium and salt, the importation of which is controlled by a Government monopoly (and from personal experience I find that rock salt for veterinary purposes must be included). Certain restrictions also apply to the importation of chemicals to be used for fertilising purposes, samples having to be submitted to the authorities (stating, in the case of sulphate of ammonia, the percentage of nitrogen and free ammonia) before permission for their sale is granted. In the importations of chemicals and drugs to be used for medicinal purposes, stringent regulations are in force, and, as it is unlawful and carries a penalty of 400 yen for each offence to make, keep, store, exhibit, give or expose for sale any Ph.J. medicines or medicinal preparations which do not conform to the requirements of the third edition of the *Pharmacopœia Japonica*, it is essential that they conform to the standards prescribed therein. The law enforcing that all such medicines and medicinal preparations conform to Ph.J. third edition requirements came into force on January 1, 1908; but preparations bearing the Government stamp as conforming to requirements of Ph.J. second edition may be sold, etc., until December 31, 1908. The laboratory will, if desired, examine goods under the Ph.J. second edition, and stamp such as are found to conform to its requirement, up to July 1, 1908. Medicines or

medicinal preparations mentioned in the Pharmacopœias of other countries, whether or not mentioned in the Ph.J., may be sold under such pharmacopœial designation so long as they conform to the standard and requirements prescribed in the Pharmacopœia concerned. In order that imports of chemicals, etc., sold for medicinal purposes may be certified as complying with pharmacopœial requirements it is customary to submit samples to the Government laboratories at either Tokio, Yokohama, or Osaka, and upon the substances complying with the necessary requirements an official seal is affixed to the containers certifying the contents to comply with the standards and requirements imposed. The mode of procedure is to submit the whole consignment for analysis, the Government analysts taking samples from each package, the fee for such analysis (except in cases necessitating intricate and delicate operation) being one yen per ten packages. Should the substance analysed conform to pharmacopœial requirements each package is sealed with a stamp by the analytical authorities, the charge for which is one sen (approximately $\frac{1}{4}$ d.) per stamp. These packages may (as in the majority of cases to suit the requirements of retail buyers) be subdivided into smaller packages, under Government supervision, upon each of which a similar stamp or seal is affixed. The importation of the greater portion of chemicals, etc., is carried out through the agency of the various European importing firms in Yokohama and Kobe, to the order of the Japanese dealer, who disposes of his stock to the various wholesale buyers, they in turn supplying the demands of the numerous retail purchasers distributed throughout the country. The fine for exposure for sale, etc., of any medicine, chemical, drug, or preparation not conforming to requirements being 400 yen, it will readily be seen that the retail buyer refuses to purchase goods carrying no certifying stamp. Consequently it is essential that importers should secure such Government approval upon their importations, and in numerous instances their failure to do so has resulted in serious financial loss. Either through incompetence or carelessness in the existing laboratories, instances have occurred in which imports, guaranteed at port of shipment as complying with requirements (and the guarantee sustained upon a further examination of a sample of the rejected shipment) have been rejected by the authorities in charge of the Government laboratories. A recent case in point concerns the rejection of a consignment of cream of tartar, certified, upon an independent analysis being made in Germany of a rejected sample, as being fully up to requirements. There is a case existing at present concerning a consignment of Dover's powder, in which one competent authority in England certifies the inaccuracy of local analytical reports, while another upholds the results arrived at locally; but as the matter is being contested by the persons concerned I am unable to give data. That carelessness or incompetence exists is evident from the numerous instances of rejections from one laboratory passing at another, and the necessary stamp, certifying the consignment to comply with requirements, being issued. Two recent instances in point concern a consignment of ammon. sulpho-ichthyolate, rejected by the authorities in Yokohama and passed in Osaka, and a consignment of saccharin which, after being rejected by the authorities in Yokohama, was held for some time and again submitted to the same laboratory, when the whole consignment was certified as complying with official requirements. Whether or not a systematic analytical examination is made in each instance is a matter of doubt among many importers, and in two instances the rejection of a consignment of boric acid and carbolic acid was enforced through "bad appearance"; from the official report it is natural to imagine the rejection was made through appearance only. Through these and similar arbitrary instances it has become customary for importers to guarantee consignments as complying with Ph.J. requirements, but not laboratory tests.

For the purpose of this article I have conferred with others engaged in the importation of chemicals and drugs for medicinal uses, and, while the arbitrary ruling of the laboratory authorities has in many instances caused great dissatisfaction, the opinion of importers seems unanimous in attributing the majority of reasons for the numerous rejections to the dishonesty of shippers abroad. The Japanese merchant is a notoriously keen buyer, and prices and a

market have to be found to meet him; and though in the majority of instances each importing firm has its special suppliers (of proved integrity) for the supply of certain substances, there are occasions when they are unable to cater to requirements at the quotation offered. This admits the "man with a purpose" (and it is satisfactory to know he "gets in" but once). Many instances have been brought to my notice in which consignments quoted for, indented, and invoiced as conforming to requirements have arrived of which only a small proportion has been up to standard. Two cases I cite—one of a consignment of carbolic acid a portion of which was almost without odour, and the other a shipment of borax which, I am assured, was principally whiting, and consequently useless for the purpose for which it was intended. Another case in point, illustrating the difficulty experienced in getting some manufacturers to comply with requirements, concerns a consignment of 1 cwt. of 5-grain tablets specifically indented to contain 3 grains of pot. chlor. in each tablet. Upon examination after arrival each tablet was found to contain 98.84 per cent. pot. chlor., and the consignment was consequently rejected by the Throat Hospital authorities, for whom it was imported. Presumably through this cause alone the nucleus of what promised to develop into profitable business transactions with the hospital in question was rendered unproductive. Upon representations being made to the manufacturers, they were met with the bland reply that "they did not consider it possible to make a tablet diluted with 2 grains of an inert substance complying with the stipulation that the tablet must not dissolve in the mouth under one hour." However feasible this explanation may be, it does not disguise the fact that no mention was made of the substitution of a ready-made article until the firm were communicated with. Of course, the argument in all these cases is that the goods can be reshipped to port of origin without any pecuniary loss (and although, upon a declaration being made at time of entry to re-export within six months, it is possible to allow articles to remain in the Customs godowns with recovery of duty after that time. I find, except in very doubtful cases, this is but seldom done); but the point which has to be very seriously considered by importers is that the deal is lost, and in many instances also the reputation for "square" dealing, which thus enables competitors to obtain a footing. I have found that in many instances the ruling of the local analytical authorities is disputed by many of the exporting firms abroad, and the consensus of opinion among local importers favours the establishment of a higher analytical appeal, conducted by some Japanese or European authority in whom both the importer and manufacturer could place more confidence, whose report should be accepted as final; as matters stand there is no redress, though the verdict of eminent analytical authorities in Europe and America reverse the analytical conclusions arrived at in Japan.

Although the question of innumerable rejections has been a serious matter with importers, it is but reasonable to imagine that in the future even more may be expected through the requirements of the Ph.J. third edition being too severe. A recent case in point is the rejection of a shipment of sodium bicarb. (manufactured by a firm in England having the highest reputation) because it errs in giving a red colouration almost immediately upon the addition of three drops of a 1-per-cent. phenolphthalein solution to an aq. destill. solution of 1 gram in 20 c.c. I have mentioned certain cases which have come to my knowledge, but many more instances undeniably exist concerning the variance of reports of local analyses with those made abroad which could be related were it not policy upon the part of the persons interested to refrain from committing themselves to statements unless the subject were approached from a legal or diplomatic standpoint. In conclusion it is safe to predict that with the present Government policy of developing internal manufactures the yearly imports of chemicals and drugs will correspondingly increase, and if a means be found of obviating the constant unsatisfactory rejections, either by instilling a sense of honesty into the minds of some manufacturers or the establishment of a higher analytical appeal in Japan, much satisfaction would be experienced by those engaged in the importations of supplies to the Island Empire.

Pharmacopœia Revision.

Notes on the Report made to the British Pharmacopœia Committee by the Committee of Reference in Pharmacy.

By T. F. HARVEY, Ph.C., F.C.S.

IN the Pharmacopœia Committee's report presented to the General Medical Council in November 1906, reference was made to the above report, and it was stated that—

The committee have resolved to publish the report, . . . and propose to take into consideration its recommendations and the published comments to which they may give rise when the form and contents of the next Pharmacopœia are under discussion.

In response to this invitation the following data and remarks may be to the point. They embody the results of work day by day in Boots' Laboratory, Nottingham, in the examination of commercial supplies or the production of the substances named and the application of the Pharmacopœia and other tests:

ACIDUM TANNICUM.—Thirteen samples of pure tannic acid of commerce lost 9.5 to 12.3 per cent. of their weight at 100° C.

AMMONII CARBONAS.—The official requirement of 31.68 per cent. NH_3 is too stringent; manufacturers generally appear unable to comply with it. Many samples of uneffloresced carbonate have shown 29 to 30 per cent. NH_3 , and 30 per cent. would appear to be a more reasonable demand.

ANISI FRUCTUS.—Twelve samples yielded non-volatile ether extract 18.8 to 23.7 per cent., while the ash ranged from 8 to 12.4 per cent. The ash of this drug is liable to be much higher unless the fruits are carefully cleaned.

BENZOINUM.—A limit of 10 per cent. insoluble in alcohol seems far too stringent. Out of forty samples only three fulfilled this requirement, the majority lying between 10 and 20 per cent.

CAFFEINE CITRAS.—The present formula seems satisfactory if only just enough water be added to render the hot mass pasty. Some water, however, is required, as otherwise the dry product yields considerable amounts of caffeine when shaken with chloroform. The B.P. citrate contains almost exactly 50 per cent. each of anhydrous caffeine and anhydrous citric acid. The citric acid may be titrated directly with barium hydroxide, and the caffeine obtained by difference after estimating moisture, a limit for which might be given—say, of 3 per cent.

CERA FLAVA.—In place of the tests now directed to be made by boiling the wax with water and with aqueous soda solution, Buchner's test for stearic acid, resin, Japan wax, etc., should be introduced, the alcoholic solution being allowed to stand twelve hours before filtration. The solubility test with alcohol might then well be omitted. Pure beeswax (after removal of moisture by filtration) is soluble in 6 to 7 volumes of chloroform. The determination of the specific gravity is unnecessary and useless. There is no satisfactory test for small quantities of paraffin; from about 5 per cent. upwards is best detected by means of Weinwurm's well-known test. Suitable limits for the acid, ether, and saponification values of pure yellow beeswax are as follows:

Acid value	...	...	18.5 to 22.5
Ether value	...	...	66 to 76
Saponification value	...	...	87 to 98

CERA ALBA.—The above remarks apply equally to white beeswax, except that the limits for acid value, etc., should be—

Acid value	...	...	18.5 to 24
Ether value	...	...	68 to 78
Saponification value	...	...	89 to 101

CETACEUM.—Good samples of spermaceti are met with melting as low as 44.5° C. The range allowed might be 44.5° to 49° C., and the saponification value 117 to 130. Four samples melting at 47° to 49°, and apparently pure, had saponification values 114 to 115.5. A maximum limit of 6 to 7 per cent. for the iodine value might be included, ensuring comparative freedom from sperm oil.

FERRUM REDACTUM.—The U.S.P. limit of 10 per million for arsenic is too stringent. No commercial sample yet examined has shown less than 80 parts As_2O_3 , the majority of samples lying between 100 and 200 parts per million. The present official requirement of 75 per cent. is a reasonable one in view of the deterioration that occurs on keeping. Freshly prepared samples will show up to 90 per cent., or even more, but usually 80 to 86 per cent. From the point of view of the retailer any raising of the standard is to be deprecated; a small quantity purposely stored in a loose container for a month fell from 86 to 74 per cent. in that time.

EXTRACTUM IPECACUANHE LIQUIDUM.—For the combined

assay of emetine and cephaeline, Paul and Cownley's method ["Phar. Jour.," 1902 (2), 257] leaves little to be desired. Psychotrine is not extracted by ether, but, being in such small amount, might well be neglected.

EXTRACTUM NUCIS VOMICÆ LIQUIDUM.—For the assay Reynolds and Sutcliffe's modification of adding powdered sodium carbonate in diminished quantity answers exceedingly well. For the strychnine determination Gordin's modification of Keller's process gives good results. [Compare Reynolds and Sutcliffe, "Jour. Soc. Chem. Ind.," 1906, 512, etc.]

GLYCERHIZÆ RADIX.—Forty-four samples of decorticated root yielded cold-water extract 21 to 35 per cent., mostly over 23 per cent.

HYDRARGYRUM AMMONIATUM.—Twenty-seven samples showed 76 to 79 per cent. of mercury, mostly under 78 per cent. Two samples showed 72.5 and 73.7 per cent. The method used throughout involved reduction by means of hypophosphorous acid, the mercury being washed successively with water, alcohol, ether, and dried in the desiccator.

LIQUOR AMMONIÆ FORTIS.—The residue on a water-bath lies between 0.00 and 0.05 per cent. in freshly bottled samples.

LIQUOR HYDROGENII PEROXIDI.—For the assay of this solution titration with permanganate, after very liberal dilution with water, in the presence of sulphuric acid, is perhaps the best method. Absence of oxalato must be insured.

LITHII CARBONAS.—Sixty samples showed 98.2 to 100 per cent. by direct titration.

MEL.—Genuine honey should be laevorotatory, pure dextrorotatory honey being of very rare occurrence. Cane sugar is almost invariably present in natural honey, but in the majority of samples it does not exceed 6.5 per cent. as determined optically before and after inversion. Honey which has become crystalline commonly exhibits the phenomenon of bi-rotation, which should therefore be guarded against (in preparing the solution for rotation before inversion) by heating at 100° C. or allowing to stand for several hours. The maximum quantity of cane sugar which may occur in genuine honey is somewhat uncertain. The United States official standard allows 8 per cent., while the Swiss chemists allow 16 per cent. Probably a 10-per-cent. limit would include most genuine samples. Normal honeys do not yield dextrinuous precipitates with methyl or ethyl alcohols, but invariably yield small amounts of flocculent precipitates with these reagents, which do not adhere to the tube and do not react on treatment with iodine and potassium-iodide solution. The proportion of water in honey varies from 15 to 24 per cent. as determined from the specific gravity of 20-per-cent. solutions, calculating the proportion of carbohydrates present by means of the usual factor. The ash of genuine honey rarely exceeds 0.25 per cent., and is always alkaline. It is also characterised by the presence of traces of phosphate, which is never entirely absent from pure honey.

MYRRHA.—An ash limit of 5 per cent. would be unduly severe; 10 per cent. is more reasonable.

OLEUM AMYGDALÆ.—A maximum figure for the iodine value of 100 is too low: oils ranging from 95.2 to 101 have been met with. Allen and Brewis give 95.8 to 101.3. Thirty-one samples have shown saponification values of 188.3 to 192.2. The published figures accord with a range of 188 to 195. Hence it is difficult to understand the suggested range of 190 to 200. The refractive index of eighty-six samples of pure almond oil lay between 1.4702 and 1.4710 at 20° C. For the detection of cottonseed, sesame, and arachis oils the well-known tests of Halphen, Baudouin, and Renard should be adopted.

OLEUM CINNAMOMI.—For the aldehyde assay the method of Burgess is most convenient and expeditious ("Analyst," 1904, 80).

OLEUM OLIVÆ.—A satisfactory monograph on the testing of this oil should include: Sp. gr.—0.915 to 0.918. Iodine value—79 to 90; the majority of samples fall between 80 and 86, but pure Italian oils occur with iodine values up to 90, while Dalmatian and Tunisian oils reach 92.8 and 94.7. Saponification value—187 to 193 (130 samples); values up to 196 have been recorded by other observers. Free acid (as oleic)—this figure is liable to much variation: in the best edible oils it is usually about 1 to 1.5 per cent.; for other purposes it is inadvisable that it should exceed 5 per cent. Refractive index—1.4687 to 1.4696 at 20° C. The refractive index of olive oil being lower than that of other vegetable oils, except perhaps arachis, the determination is of value. For the exclusion of cottonseed, sesame, and arachis oils the recognised tests of Halphen, Baudouin, and Renard should be adopted. The Becchi test should be abandoned. In the Baudouin test slight coloration comparable with that produced by 1 to 2 per cent. of sesame oil must be ignored, unless the test is carried out with the liquid fatty acids, since pure olive oils from some districts give a similar tint. In Renard's test the manipulative details are of consider-

able importance; in this respect the modification described by Tortelli and Ruggeri ("Analyst," 1898, 273) is excellent.

OLEUM LINI.—The saponification values of most fixed oils are so nearly equal as to be of little service in differentiating them from each other, although, of course, of value in showing freedom from mineral oil, a distinctly uncommon form of adulteration in the official fixed oils. For linseed oil the iodine value is of great service, and should never fall much below 170.

OLEUM RICINI.—The acetyl value or even the acetyl saponification value alone, taken in conjunction with the behaviour towards 90-per-cent. alcohol and petroleum spirit, establishes the purity of this oil. The acetyl value of forty-two samples lay between 140 and 151, and the acetyl saponification value between 302 and 308. For castor oil the iodine absorption is of no diagnostic value.

OLEUM SANTALI.—A santalol content of 94 per cent. is too rigorous as a minimum figure. A range of 90 to 96 per cent. would probably include most pure oils. Pure oils of rotation -14° and under have been noted.

PARAFFINUM LIQUIDUM.—The specific gravity in the present Pharmacopoeia is too high, but there is little difficulty in getting oils of specific gravity about 0.880. When the specific gravity falls much below 0.880 the oil has frequently an objectionable odour or taste.

PEPSINUM.—It has been found that the most satisfactory way of obtaining good distribution of the albumen in the testing of this substance is to employ stoppered bottles and to shake the (sieved) albumen with the acid water before adding the pepsin (in solution). With this modification there seems little fault to find with the process as merely demonstrating the solvent action of the pepsin.

RHEI RADIX.—The 90-per-cent. alcoholic extract of this drug has been found to vary from 33 to 45 per cent. (twenty-six samples).

SAPO ANIMALIS, SAPO DURUS, SAPO MOLLIS.—Pure soda soaps made by the usual processes contain about 30 per cent. of water. Lewkowitsch remarks: "This might be called their water of constitution, inasmuch as a soap cannot be made in the soap-kettle with less water." Since such soaps are of necessity more uniform than after exposure to the air, it seems preferable to preserve them in this moist condition for official purposes. If a limit for water + glycerol in *sapo mollis* be prescribed, 50 per cent. would be a reasonable figure. Much of the soft soap supplied as B.P. is very alkaline. The directions for estimating free alkali in the B.P. soaps should be altered, and the alkaline carbonate be titrated when cold in the presence of methyl orange in the usual manner. The percentage of free alkali permitted by the B.P., and expressed as Na₂O on the dry soap, lies somewhere between 0.185 and 0.372 per cent. according to the temperature at which the titration is conducted. The lower figure is unnecessarily severe—0.25 per cent. corresponds to about one-fortieth of the total alkali present, and would meet all requirements. It is scarcely possible that any soap could contain alkali hydroxide after it had been dried and powdered. For the determination of the free alkali in soft soap the directions should be amended so as not to imply that the soap is to be dried and powdered.

SODIUM HYPOPHOSPHITE, HYPOPHOSPHOROUS ACID, AND HYPOPHOSPHITES are very conveniently determined iodometrically in acid solution, using excess of iodine (Rupp and Finck). Convenient quantities are 20 c.c. N/10 hypophosphite solution + 10 c.c. of 1.1 hydrochloric acid + 30 c.c. N/10 iodine solution. This is allowed to stand several hours, a blank experiment being made, and the excess of iodine titrated with thiosulphate in the usual manner. The final product in acid solution is phosphorous acid. 1 c.c. N/10 iodine = 0.004403 gram sodium hypophosphite.

STAPHISAGRIE SEMINA.—Four samples of cleaned seeds after grinding gave ash = 9 to 12.8 per cent. Four commercial powders gave ash = 13 to 30 per cent. A limit of 15 per cent. has been suggested, and seems reasonable.

STRAMONI FOLIA.—The ash of good samples of this drug often reaches 30 per cent. chiefly on account of its large calcium oxalate content, which is necessarily somewhat variable. The ash of thirty-four samples varied from 12.4 to 22.7 per cent., with ash insoluble in hydrochloric acid from 0.3 to 7 per cent. Of this number only four samples touched 15 per cent. or less. Other observers have recorded 13.6 to 22 per cent. The committee's suggested limit of 15 per cent. is obviously erroneous.

STYRAX.—The content of neutral ethers + alcohols in unstained storax (five samples) was found to lie between 29 and 40 per cent.; the free acids, as cinnamic, between 3.2 and 5.3 per cent. The method used involved the extraction of ethers, etc., from alkaline solution, precipitation of resins by CO₂, and subsequent extraction of aromatic acids with ether after the addition of sulphuric acid.

SYRUPUS FERRI IODIDI.—Would it not be advisable to substitute a liquor eight times the strength of the syrup and prepare the syrup as required? Such liquor contains 66.4 per

cent. iodine, and is very conveniently standardised by silver nitrate and ammonium thiocyanate after Volhard.

TINCTURA CINCHONE.—The present assay process for cinchona preparations gives in experienced hands consistent results, the only necessary modifications being the substitution of dilute potash for water in the washing of the benzoated amylic alcohol liquors, and the more liberal use of chloroform in the final extractions. In the case of the liquid extract it is better to work on 2.5 c.c., adding an equal volume of the glycerin menstruum. The deposits which form in cinchona preparations have been found to contain alkaloid and to lead to diminution in the alkaloidal strength.

ZINCI VALERIANAS.—The analysis of eleven samples has shown zinc oxide 26.8 to 27.5 per cent. Till recently there was great difficulty in obtaining a salt of reasonable purity, many samples containing large quantities of sulphate. An oxide content of 26 to 27 per cent. is too stringent: the upper limit should be raised to 28 per cent.

ZINGIBER.—Soluble ash should be considered in conjunction with the cold-water extract, which is usually over 9 per cent. Not unless both figures are low is a given sample necessarily to be suspected. As has been repeatedly pointed out, the adoption of a 5-per-cent. limit for alcohol extract would exclude the finest Jamaican gingers and also some fine samples of Cochin. Further, the ash of genuine clean ginger not infrequently exceeds 5 per cent. The United States Department of Agriculture adopts an 8-per-cent. limit for the ash of unlimed ginger and 10 per cent. for limed. In conclusion it cannot be too strongly emphasised that no good purpose is served by the adoption of too stringent limits for ash, etc.

JAPANESE CALOMEL.

UNDER the name of "kanko" ordinary calomel is now largely manufactured by the Japanese, but they appear to have made a peculiarly light feathery product sold as "keifun" since the tenth century. "Keifun" appears, says the "National Druggist," on the market as light, thin, lustrous scales of a white or cream colour; it is four times as bulky as ordinary calomel. For its manufacture a mixture containing 3 parts of a peculiar red clayey earth (mitsuchi)—which when baked yields a very porous ware) and 1 part of bay-salt is made into balls the size of a chestnut. A battery of sixty iron pots (6 in. deep by 6 in. wide) is arranged on the floor of a furnace covered with mitsuchi earth. Each pot has a wooden chimney fixed by a tamping of earth, a perforated board being placed over them. The furnace is fired by wood, and it is done so skilfully as to avoid the production of smoke. The temperature of the furnace does not approach that of a red heat; 40 lb. of wood is sufficient for the charge of sixty pots. When the pots are sufficiently heated the surface of the table is damped, two or three of the balls of clay and salt are dropped into each pot with a small quantity of quicksilver, earthenware cups 3 in. high by 6 in. wide are placed over the pots, the firing is continued, and the pots are left for about three hours. The sublimed calomel is in the form of feathery coherent needles. The clay has apparently a mechanical action. The mercury vapour diffuses through its pores, where it meets hydrochloric acid vapour (produced by the decomposition of the magnesium chloride in the baysalt by heat) and air. The calomel produced is free from mercuric chloride.

According to C. Yamamoto ("Pharmaceutical Journal of Japan") subchloride of mercury is readily prepared by heating in an earthenware vessel a mixture of mercury, iron oxide, and bitter lye. The last-named is the mother liquor obtained in the production of baysalt, and contains principally magnesium chloride. The sublimed calomel is in the form of pretty scales, which on washing once with water can be freed entirely from corrosive sublimate.

PHILADELPHIA COLLEGE OF PHARMACY.—During April there was opened in the Division of Education of the Pennsylvania State Museum at Harrisburg a permanent educational exhibition intended to exploit the various educational institutions established in the State, including universities, colleges, technical schools, high schools, and manual training schools. The Philadelphia College of Pharmacy, through its Historical Committee, prepared an exhibit illustrating "The History and Development of the First School of Pharmacy in America." This contains portraits of the presidents of the College and of the members of her faculty from the foundation in 1821 to the present time; also photographs of the present College buildings, laboratories, museum, and lecture-rooms, as well as individual exhibits by departments of the College. The committee have prepared for the exhibit a book containing "The Memoirs of Some of Those who have been Associated with the Progress and Development of the Philadelphia College of Pharmacy."

The Canadian Formulary.

A CONTINUATION of the new recipes published in the "Canadian Formulary of Unofficial Preparations" (Ontario College of Pharmacy, Toronto, 50c.)

Liquor Santali Flavi Compositus.

(From "Pharmaceutical Formulas," p. 683, No. I.)

Liquor Zingiberis.

Strong tincture of ginger (1 in 2) ...	10 fl. oz.
Purified talcum ...	6 $\frac{3}{4}$ oz.
White sugar ...	6 $\frac{1}{2}$ oz.
Distilled water, sufficient to make ...	20 fl. oz.

Triturate the tincture of ginger with the sugar and purified talcum, add the distilled water, shake and filter, returning the first portions of filtrate to the filter, until a clear liquid is obtained.

Liq. Hypophosphitum Co. sine Saccharo.

Potassium hypophosphite ...	320 grains
Calcium hypophosphite ...	320 grains
Sodium hypophosphite ...	80 grains
Iron hypophosphite ...	160 grains
Manganese hypophosphite ...	80 grains
Potassium citrate ...	300 grains
Citric acid ...	100 grains
Quinine (alkaloid) ...	80 grains
Strychnine (alkaloid) ...	2 $\frac{1}{4}$ grains
Hypophosphorous acid (10-per-cent.) ...	a sufficient quantity
Oil of sweet-orange ...	12 minims
Alcohol ...	10 fl. dr.
Gluside ...	25 grains
Glycerin ...	20 fl. oz.
Distilled water, sufficient to make ...	80 fl. oz.

Dissolve the hypophosphites of potassium, calcium, and sodium in 28 fl. oz. of boiling distilled water. Dissolve the hypophosphites of iron and manganese, the citrate of potassium, and citric acid in 8 fl. oz. of water with a gentle heat. Dissolve the alkaloids in a little water with a sufficient quantity of hypophosphorous acid. Mix these solutions, and add the glycerin. Dissolve the gluside and the oil of orange in the alcohol with gentle heat, and mix with the foregoing solution, then add sufficient distilled water to make 80 fl. oz.

Pigmentum Iodi Compositum.

(Mandel's Solution.)

Iodine ...	5 grains
Menthol ...	5 grains
Potassium iodide ...	15 grains
Glycerin ...	1 fl. oz.

Triturate until a perfect solution is obtained.

Pulvis Aloes et Canellæ.

(Hiera Picra.)

[The London Pharmacopœia formula. See "Pharmaceutical Formulas," p. 648.—EDITOR C. & D.]

Pulvis Benzoatis Compositus.

(Skeenes' Mixture.)

Benzoic acid ...	1 part
Potassium bicarbonate ...	3 parts
Powdered sugar ...	12 parts

Triturate the benzoic acid and potassium bicarbonate in a hot mortar for ten minutes, then add the powdered sugar, previously warmed, and triturate all together, keeping mortar continuously hot.

Dose, $\frac{1}{2}$ to 1 drachm.

Pulvis Santonini Compositus.

Santonin ...	125 grains
Subchloride of mercury ...	125 grains
Rhubarb, in fine powder ...	200 grains
Sugar ...	50 grains
Oil of peppermint ...	15 minims

Mix intimately.

NOTE.—Each 4 grains contains 1 grain each of santonin and calomel and 1 $\frac{1}{2}$ grain of rhubarb.

Spiritus Asparagi Compositus.

Gum guaiacum ...	1 oz.
Asparagus-seed ...	1 oz.
Parsley-seed ...	1 oz.
Black haw ...	2 $\frac{1}{4}$ oz.
Henbane-leaves ...	100 grains
Compound spirit of orange ...	4 fl. dr.
Diluted alcohol, a sufficient quantity	

Reduce the drugs to a powder and percolate with diluted alcohol to make 15 $\frac{1}{2}$ fl. oz., to which add the compound spirit of orange.

Syrupus Acaciæ.

Mucilage of acacia ...	1 fl. oz.
Simple syrup ...	3 fl. oz.

Mix.

Syrupus Eucalypti Compositus.

Fluid extract of eucalyptus ...	5 fl. oz.
Fluid extract of horehound ...	2 fl. oz.
Fluid extract of elecampane ...	2 fl. oz.
Fluid extract of liquorice ...	2 fl. oz.
Fluid extract of comfrey ...	2 fl. oz.
Ammonium chloride ...	480 grains
Magnesium carbonate ...	240 grains
Compound spirit of orange ...	4 fl. dr.
Sugar ...	20 oz.
Water, sufficient to make ...	40 fl. oz.

Triturate the fluid extracts and compound spirit of orange with the magnesium carbonate and 8 fl. oz. of water, and let stand two hours. Filter through a previously moistened filter, passing enough water through the filter to make 16 fl. oz. of filtrate, in which dissolve the sugar and ammonium chloride, then add sufficient water to make 40 fl. oz.

Syrupus Glycyrrhizæ Aromaticus.

The following formula may be substituted for the one given in "Pharmaceutical Formulas," p. 781:

Fluid extract of liquorice (for quinine mixtures) ...	8 fl. oz.
Oil of coriander ...	20 minims
Oil of cloves ...	10 minims
Alcohol (95-per-cent.) ...	2 fl. oz.
Granulated sugar ...	27 oz.
Water, sufficient to make ...	40 fl. oz.

Mix the fluid extract with the alcohol, in which the oils have been previously dissolved, and 8 fl. oz. of distilled water. Dissolve the sugar in this liquid, and add enough water to make 40 fl. oz.

Syrupus Picis Liquidæ.

Tar ...	3 oz.
White sand ...	4 oz.
Glycerin ...	4 fl. oz.
Sugar ...	32 oz.
Water, sufficient to make ...	40 fl. oz.

Mix the tar intimately with the white sand, pour on 8 fl. oz. of water, and stir frequently for twelve hours, then pour off the water and throw it away. Pour 16 fl. oz. of boiling water upon the residue, stir well and frequently for fifteen minutes, add the glycerin, and set aside for twenty-four hours, occasionally stirring, and decant the clear solution, and filter. Dissolve the sugar in the filtrate with gentle heat, cool, strain, and pass enough water through the strainer to make 40 fl. oz.

Syrupus Quinina Phospho-Muriatis.

Potassium bicarbonate ...	616 grains
Magnesium carbonate ...	352 grains
Precipitated calcium carbonate ...	352 grains
Quinine hydrochloride ...	70 grains
Strychnine hydrochloride ...	2 $\frac{1}{2}$ grains
Orange-flower water, natural, concentrated ...	5 fl. oz.
Phosphoric acid (85-per-cent.) ...	5 fl. oz.
Soluble ferric phosphate ...	282 grains
Water ...	310 minims
Syrup, sufficient to make ...	40 fl. oz.

Dissolve the several carbonates and the alkaloidal salts in the phosphoric acid, previously diluted with the orange-flower water. Then dissolve the soluble ferric phosphate in the water, previously warmed, and add it to the foregoing solution, and lastly add sufficient syrup to make 40 fl. oz.

Syrupus Senegæ.

Fluid extract of senega ...	8 oz.
Glycerin ...	2 oz.
Sugar ...	40 oz.
Magnesium carbonate ...	360 grains
Distilled water, sufficient to make ...	40 fl. oz.

Mix the fluid extract and glycerin, then triturate with the magnesium carbonate and 4 oz. of sugar, then gradually add 10 oz. of water, and filter. Dissolve the sugar in the remainder of the filtrate by the percolation method, and add water, if necessary, to make 40 fl. oz.

Tinctura Carminativa.

Spirit of chloroform ...	5 fl. oz.
Compound tincture of cardamom ...	5 fl. oz.
Compound tincture of lavender ...	5 fl. oz.
Aromatic spirit of ammonia ...	5 fl. oz.

Mix.

Adult dose, 1 fl. dr.

Photographic Notes

(By a Pharmaceutical Camerist.)

Time Developer.

MR. ALFRED WATKINS, the inventor of factorial development, has gone a step further and produced a time developer for all makes of plate, which has the additional advantage of a method by which the time for development can be varied according to the temperature. This adjustment is managed by a mechanical "thermo indicator" attached to the bottle. If, for instance, from the speed card it is seen that a given plate requires three minutes' development at 60° F. the thermo indicator shows that three and three-quarter minutes will be needed at 54° F. A red light is not needed for carrying on development, as it is not necessary to examine the plate during the process. The developer sells at 1s. a bottle, and, being concentrated, offers advantages to tourists.

Retouching Medium.

MR. A. T. HALL communicates the following formula for retouching medium to the "British Journal of Photography." It is stated to have been arrived at after several experiments:

Pure American turpentine	...	1½ oz.
Oil of spike	...	½ oz.
Pale resin	...	1 oz.
Raw linseed oil	...	8 minims
Terebene	...	20 minims
Essence of pear	...	¼ oz.

The last two ingredients are used for their quick drying properties. If the solution is too thick, it may be diluted with more turpentine. Only the least possible amount is required to be spread over the negative, on those parts to be retouched, and it is best applied with the fingertip.

Exposure through Colour Filters.

MR. MCINTOSH, the Secretary of the Royal Photographic Society, recommends the following process for estimating the increased exposure necessary when using a colour filter in orthochromatic work. The first thing to do is to make a gradometer in the following manner. Photograph a sheet of white paper on a half-plate thus: Draw the shutter of the dark slide to its full extent and give, in a good light, a short exposure, say $\frac{1}{64}$ second. Push the shutter of the slide in about $\frac{1}{2}$ inch, and give a second exposure of the same duration. The shutter is pushed in another $\frac{1}{2}$ inch, and an exposure of $\frac{1}{32}$ second given, and this process is repeated, doubling the exposure each time and giving twelve exposures on one plate. The plate is developed only just far enough to show the distinct steps when a negative is produced, in which the lightest and densest parts have a ratio of 1:2048. From this is cut a quarter-plate piece lengthways, and should include the lightest part of the negative (this gets the steps running the whole length of the plate, and not crossways as in the original). This will give a gradometer with a scale ranging from 1 to 32. The scale is put into a quarter-plate slide along with a plate of the brand to be tested, the two being film to film, the scale nearer the lens. The slide is put in the camera, and the shutter drawn, say $\frac{1}{2}$ inch, and an exposure made on the piece of white paper without the filter of, say, one second. The filter is now placed in position, and another exposure is made of the same duration, the slide shutter being withdrawn another $\frac{1}{2}$ inch, the first (non-filter) exposed part of the plate being covered with a piece of black paper so that it does not get any further exposure. The process of exposing a measured part of the plate is repeated until the plate has been fully exposed, but in this case the exposures are all of the same length, and are not doubled as when making the scale. Calling the last exposure 1, the other parts of the plate will be 2, 3, 4, 5, 6, and so on. When a print is being made from this negative the section exposed without the filter is compared with those exposed with the filter, and it thus becomes quite easy to judge the increased exposure required. A gradometer made in this manner is of great use to the practical photographer in other ways besides the measuring of exposures through colour filters, as, for instance, in comparing densities and range of gradation in making carbon prints, etc.

Practical Notes and Formulæ.

Sterilisation of Cocaine Solution.

IN a paper read before the Paris Society of Pharmacy ("Bull. Commenc." 193), Lesure shows that the amount of decomposition of the cocaine hydrochloride in aqueous solutions during sterilisation in an autoclave at 110°-120° C. is in proportion to the alkali dissolved from the glass, and is not due to the action of heat upon the alkaloidal salt. In fused silica vessels no decomposition took place during sterilisation.

Preparation of Mercury Ointment.

G. H. ROENER ("Pharmaz. Jour.") says that the tedious process for making this ointment may be expedited by triturating 1 grain of mercury oleate (containing 10 per cent. of mercury) with 4 oz. of metallic mercury, and after a few minutes adding to the homogeneous mass the necessary quantity of fat. The oleate of mercury containing 10 per cent. of mercury can be readily made by grinding the washed and dried oxide of mercury from 271 parts of mercuric chloride, with 1,800 parts of commercial oleic acid, heating until the mass becomes homogeneous.

Vasoliments.

THE basis of vasoliments is prepared according to formulæ suggested by Welmans, Roch, and others. The one given in "Pharmaceutical Formulæ," vi., p. 818, is as follows:

Oleic acid 50, alcoholic ammonia 25. Heat to saponify, then add liquid paraffin 100, and continue the heat until solution is effected, making up to 175 with alcohol (all by weight).

The "Pharm. Zeit.," 1908, 25, quotes interesting observations by H. Kühl on the method of preparation. He states that it is important the oleic acid should be heated with the ammonia until the spirit and excess of ammonia are dissipated. The warm vasoliment should not smell of ammonia. If heating is not continued for a sufficient length of time the vasoliment, though clear at first, becomes cloudy again when warmed.

Filtering and Filter-papers.

PROFESSOR W. L. SCOVILLE ("Druggist Circular") suggests that the pharmacist requires at least the following kinds of filter-papers, viz.:

1. A thin rapidly acting filter-paper for alcoholic solutions to avoid loss by absorption and evaporation.
2. A firm paper free from loose fibres for eye-lotions, etc.
3. A thick and soft filter for syrups and slimy liquids, so as not to clog readily.
4. A thick and firm paper for oils, etc.

Attention is called to the large amount of waste in material caused by using too large papers; also that the use of magnesia, kaolin, etc., as clarifying agents results in a loss of both material and time. There is further danger of changing the composition of the filtered liquid, especially if of an acid nature. These latter facts are by no means novel.

Liq. Creosolis Comp. U.S.P.

F. NITARDY ("Amer. Journ. of Pharm.," May 1908, p. 212) gives an improved formula for the above preparation as follows:

Cresol	...	...	500 grams
Linseed oil	...	...	350 grams
Potassium hydroxide	...	...	80 grams
Alcohol	...	...	35 c.c.
Water to	...	...	1,000 grams

Dissolve the potassium hydroxide in 50 grams of water in a tared dish, add the linseed oil, and mix thoroughly; heat on a water-bath to about 70° C., incorporate the alcohol, continuing heating until saponification is complete. Then add the cresol, stir well, cover the vessel, and allow to stand, stirring occasionally until a clear solution is produced; finally add sufficient water to make the finished product weigh 1,000 grams.

The points of difference from the official process are the direction for heating and the addition of alcohol. It is claimed that the solution is quite miscible with water, and that it is not caustic or irritating.

Chemical Society.

A MEETING of this Society was held on June 4 at Burlington House, London, W., the chair being taken by Sir W. Ramsay, F.R.S., President.

Of the long list of papers down for reading only three were marked with the asterisk which indicates that their authors intended to be present, and the attendance of Fellows was unusually small. The first paper was by Professor Rennie, of Adelaide University, and was read by Dr. Armstrong for the author. It dealt with the influence of salts on the

RATE OF SOLUTION OF COPPER BY NITRIC ACID.

and was the outcome of some industrial research undertaken in connection with a process for the treatment of lead-zinc concentrates produced at the Broken Hill Mines. It showed that the rate of solution of copper by nitric acid is greatly accelerated by the presence of lithium or sodium nitrate, is scarcely affected by potassium nitrate, and is retarded by caesium or rubidium nitrate, whence it was concluded that the effect in the case of any group of nitrates diminishes with increase in atomic weight of the metallic constituent in the nitrate used. The effect was explained as due to the formation of hydrates in solution in the case of accelerating nitrates and to the formation of acid salts in the case of the retarding nitrates, resulting in the withdrawal of water and acid respectively. In the discussion which followed, Professor Veley reminded Fellows of the similar work he had done many years ago, in which he showed that copper is insoluble in nitric acid free from nitrous acid, and the important part played by nitrous acid in this matter was also referred to later on by Mr. Reynolds and by Dr. Armstrong, the latter taking the opportunity of pointing out that so far as he knew no textbook on chemistry in English gave an accurate account of the action of nitric acid on copper.

ALLYLAZOIMIDE

was the subject of the next paper, by Dr. M. O. Forster and Mr. H. Fierz, which described the preparation of this substance and its conversion into a crystalline polymeride having a heterocyclic constitution. Incidentally Dr. Forster stated that the presence of two symmetrically situated double linkings in a cyclic substance seemed to facilitate polymerisation, a generalisation which may some day have industrial applications since many investigators are searching for a cheap hydrocarbon which will polymerise into something more or less like rubber.

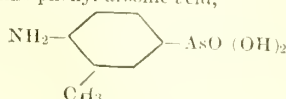
The last paper was a contribution from the Wellcome Chemical-works, Dartford, on some

NEW ARSENIC COMPOUNDS.

By Frank Lee Pymen and William Colebrook Reynolds.

The authors have been engaged for a considerable time in the preparation of new aromatic arsenic compounds, and as recent publications have shown that other chemists are working on similar lines, they deemed it advisable to publish the results obtained hitherto. The new aromatic arsenic compound,

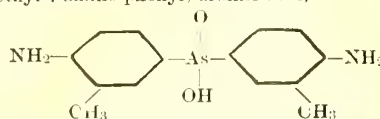
3-methyl-4-amino-phenyl-arsinic acid,



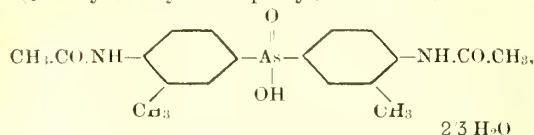
which has recently been described in the "Berichte" by both O. and R. Adler and Benda and Kahn, has been in the authors' hands for some months, and has been the subject of physiological and clinical investigation in the form of its sodium salt $C_7H_7O_3N As Na, 3\frac{1}{2}H_2O$, and also in the form of the anhydrous sodium salt of its mono-acetyl derivative, 3-methyl-4-acetyl-amino-phenyl-arsinic acid. These salts are readily soluble in water, giving a neutral solution, and are distinguished by a low toxicity; they have met with some success in trypanosomiasis (sleeping-sickness), but while they are highly toxic to certain strains of trypanosomes, other strains are more resistant. These salts have, however, proved of great use in the treatment of syphilis, and the results obtained in this connection are exceedingly promising.

In the preparation of p-amino-phenyl-arsinic acid and 3-methyl-4-amino-phenyl-arsinic acid by heating aniline and o-toluidine arsenates respectively, the authors have obtained as by-products the corresponding arsenic acids, which are formed by the condensation of two molecules of the base with one molecule of arsenic acid.

Di (3-methyl-4-amino-phenyl) arsinic acid,

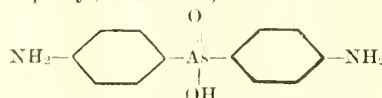


Di (3-methyl-4-acetyl-amino-phenyl) arsinic acid,

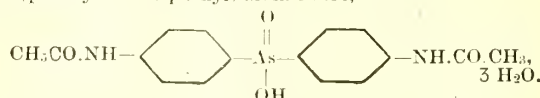


2 3 H₂O

Di (p-amino-phenyl) arsinic acid,



Di (p-acetyl-amino-phenyl) arsinic acid,



3 H₂O.

These arsinic acids are colourless, insoluble, crystalline powders, but their salts are very easily soluble in water, and are now being investigated clinically with a view to possible use in medicine. As yet, however, the results obtained with these substances are not sufficiently conclusive.

In the discussion which followed Dr. Jowett stated that the treatment of sleeping sickness by arsenic compounds presented exceptional difficulties, one of the most curious of these being the fact that there appeared to be several strains of trypanosomes, some of which were highly resistant to arsenic and consequently at present only those cases of sleeping sickness due to non-resistant strains were amenable to treatment. The President asked if any attempt had been made to produce "antimonates" of the same type as the arsenates described, and in reply Dr. Pymen stated that they were not producible so simply, and at present the cost of production was prohibitive. The President further stated that he had been asked by Dr. Cushny for advice in the selection of antimony compounds for injection in cases of sleeping sickness, the idea being to avoid the formation of the painful ulcers which form at the seat of injection when tartar emetic is used as at present. Of the salts he recommended, Dr. Cushny stated that the old-fashioned "Schlippe's salt" (sodium sulph-antimonate) had given the best results so far.

THE "British Medical Journal," continuing the publication of analyses of secret remedies, gives in the issue for June 6 the composition of several popular remedies for the eyes and ears.

MESSRS. SHAPLEY & WEIR, chemists, 8 The Pavement, High Road, Seven Kings, are always to the front with photos of current events, and on Saturday morning they had in their window a splendid photo of General Buller's funeral at Crediton on the previous day.

PEROXIDE OF HYDROGEN probably deserves much more extended employment in surgical treatment in this country, says the "Hospital." Aurists have long known its value in otitis media, and in France its use among surgeons as an antiseptic wash and dressing for suppurating wounds and ulcerous surfaces has increased enormously.

MACASSAR COPAL.—The export of copal from Macassar in 1906 was more than doubled in 1907. The demand both in Europe and Singapore was exceptionally great and prices abnormally high; but during the latter part of the year a sudden decline took place, owing chiefly to the financial crisis in the United States, and the market has remained dull and inactive ever since.

Prescription Problem.

THE prescription reproduced on p. 830 of our issue of May 30 was sent to us by Mr. R. W. Robbins, Bexhill-on-Sea. It is typical of a class of local prescriptions about which there is not the slightest difficulty to local dispensers who know the peculiarities of a prescriber's handwriting, but to others the difficulty is very real, as has been amply proved by this competition. The following is Mr. Robbins' rendering of the prescription, modified in a few terminals by ourselves:

R.	Liq. Strychniæ	...	...	...	3ixx.
	Ac. Phos. Dil.	...	...	...	3ix.
	Tr. Strophanthi	...	...	...	xxviii. (18)
	Et. Chlo.	...	...	...	3ss.
	Gly.	...	...	...	3ss.
	Aq. Cinn. ad	...	...	...	3vj.

Sig. 3ss. t. i. d. ex [aq.] p. ci.

We are not without doubt in regard to the last ingredient in the mixture. Only one in twenty of the competitors renders this as Mr. Robbins does—"aq. cinn.," the majority of the rest giving "aq. aur.," but on carefully analysing the handwriting we have come to the conclusion that Mr. Robbins is right, and he has the additional advantage of familiarity with the handwriting.

We regret that no prize can be awarded on this occasion, not a single one of the postcards received being free from errors. We indicate some of these in the following analyses:

First Ingredient, *Liq. Strychniæ*.

This item was in several cases given as liq. strychninæ and more rarely liq. strychn.

Second Ingredient, *Ac. Phos. Dil.*

Two competitors gave acid. mur. dil.

Third Ingredient, *Tr. Strophanthi*.

This was represented also as tr. strophanthus, tr. strophanthis, and tr. strophanth.

Fourth Ingredient, *Et. Chlo.*

No one sent the correct reading, the variety was wonderful, but ol. æth. and ol. æt. were prime favourites, the nearest rendering was æ. chlo. The following were also sent in: ol. chl., ol. chlor., ol. chfo., ol. chlorof., ol. cl., ol. M.P., ol. menth. pip., sp. chl., æ. chlor., ol. æther., ol. cube., ol. cub., ol. cubeb., ol. cubeb., ol. caryoph., ol. citr., ol. citrati, ol. acti., ol. caps., ol. nitro., ol. cajeput, ol. olivo (olivæ), ol. cato., tr. æt., æ. carbol., æth. acetic.

Fifth Ingredient, *Gly.*

The majority sent in sp. for this, many more sent gl., sy., syr., spr., syrup, and sp. (æth.).

Last Ingredient, *Aq. Cinn.*

The majority, as stated, gave aq. aur. Other selections given were aq. am., aquam, aq. anethi, aq. anisi, aq. carui, and one only advised to fill up with aq. ammon.

Directions.

Many were in favour of p.a. instead of p.c., giving "pauillo aquæ," a little water, "poculo aquæ," a cup of water, or "parte aequali," an equal part, as translations, ½ p.c. for ex p.c., ter ad 4. for t.i.d. ex., a.p.c., and ia (semi aq.) were also given.

Handwritten note:
 R. W. Robbins, Bexhill-on-Sea
 3 doses
 Sig. t. i. d. ex [aq.] p. ci.
 → 3 ←

Mr. C. J. Peterkin, Sydney, sends us a prescription of which the above is a part. We shall receive postcard renderings of this up to Wednesday, June 17. Australian and New Zealand subscribers and their staffs may address their replies to the Editor of "The Chemist and Druggist of Australasia," Fink's Buildings, Melbourne, who will adjudicate upon them and award a prize in his discretion.

cretion. Such postcards should be posted within three days of the delivery of this copy of THE CHEMIST AND DRUGGIST.

Dull-season Advertising.

By F. A. DEGEN.

AN oak is not felled by one stroke. To accomplish anything one must be perpetually "at it." Continual advertising keeps the wheels of business revolving. To stop advertising even for a few weeks is to lose energy. To set wheels in motion after a period of comparative inactivity requires extra power. For this reason a break in advertising continuity is not economical. Besides, people are ill at all seasons of the year, and must therefore patronise a chemist. It is reasonable to suppose that they will buy of those who make the effort to get their trade. Advertising is, in a way, an invitation to buy, and people are more apt to go where they are cordially invited than to places where they are not. If advertising helps to introduce and to sell goods in busy times, why not at the slacker seasons as well? When a man puts his hands behind his back he is not reaching out for trade, and what he does not reach for he does not get.

The most successful business concerns never let their name drop out of sight. If they cannot take the risk of retiring for a time from soliciting public attention, how can the smaller firms afford to do so? Why not learn from the successes of others? It is cheaper to do this than to gain knowledge from our own failures. That the general public has a short memory is a well-known fact. Even the most sensational episodes are "nine-day wonders" and are promptly forgotten. Advertisements are great memory-joggers.

A powerful argument in favour of summer advertising is the fact that more reading is done during this period than at any other season. Observe the rush for the papers at summer hotels. See the people in trains, boats, on the sands; are not most of them armed against boredom with magazines, etc.? Men and women who would not look at an advertisement during the busy season eagerly scan every sheet of the paper, advertisements included, while on their holiday. Leisure puts the mind into a receptive condition, and then is the time that the clever advertiser seizes his opportunity.

A few impulsive people are attracted by bargain sales—they buy in haste, and may, or may not, repent at leisure; but most purchases are thought of a long while before the consummation of the trade. The wise advertiser plants a suggestion in the brain of his reader; the idea germinates, but it frequently takes months before the determination to possess the article in question is developed. Why is not the dull season as good a time for scattering these seeds as any other?

We all know the power of suggestion; it has been scientifically proved to be a great force. Why not apply it to advertising? A name that has been persistently kept before the public is likely to come glibly from the tongue of a purchaser, and before he knows it he has asked for something which has only become familiar to him because it has been well and continually advertised. The power of suggestion is as great at one season of the year as at another.

Most business-men do not advertise during the dull months. The man with the courage to do so is conspicuous, he comes right out into the limelight and gets more publicity for his money than if he were simply one in a crowd.

Continuity stands for strength, and continuous advertising impresses the public with the stability of a house. A liberal use of printers' ink at all seasons keeps the dust off the shelves. Because you have done well without continuous advertising does not prove that you will not do better by continuing it through twelve months in the year.

Advertising during the summer is not a speculation, but an investment. Try it!

CAPE ARGOL.—During 1907 Cape Colony exported 163,316 lb. of argol, valued at 2,849/., as compared with 111,922 lb., valued at 1,942/., in 1906.

JAVA COCA.—The exports of coca-leaves from Java during 1907 amounted to 4,848 bales, against 2,491 bales in 1906 and 1,372 bales in 1905.

Westminster Wisdom.

(From our Parliamentary Representative.)

The House of Commons reassembled on Wednesday, June 10, and sat for fully three hours, nearly all that time being devoted to discussion of the grievances of certain Customs and Inland Revenue officers. Before the House adjourned last week, Mr. Rees put a question to the Chancellor of the Exchequer which raised the long-debated question of

CO-OPERATIVES AND INCOME-TAX.

Mr. Rees wants the Government to appoint a Select Committee or Joint Committee of both Houses to inquire into the practice of co-operative trading societies registered under the Industrial and Provident Societies Acts who trade with persons other than their own members, in contravention of Section 24 of the Industrial and Provident Societies Act, 1893, and pay no income-tax on such trade. Mr. Lloyd-George said he would consider the suggestion, which, it may be noted, was a recommendation by a Departmental Committee of the Treasury.

THE POISONS AND PHARMACY BILL.

It is now decided that the Poisons and Pharmacy Bill is to be taken in the House of Lords towards the end of this month, though it is still uncertain who will have charge of the measure on behalf of the Government in place of Lord Tweedmouth, whose illness, of course, prevents him from taking the part he intended to do. When the Bill reaches the House of Commons Mr. Herbert Samuel will have charge of it, but before the Lower Chamber proceeds with the consideration of the Bill he will receive deputations from those who desire to see considerable alterations introduced. In the meantime Mr. Jesse Boot has circularised members of Parliament asking them to vote for it. The case which he makes out for the Bill is as follows:—

Since the decision in 1880 of the House of Lords affirming the right of joint-stock companies to carry on the business of chemists various attempts have been made both in the Courts and in Parliament to restrain the exercise of this right. In Parliament, after repeated and unsuccessful attempts to prevent companies from carrying on business, a demand was made that all directors of a company or co-operative store should be qualified chemists. This meeting with little or no support, it was then asked that at least one director should be qualified. Eventually, as a last resource, Mr. Winfrey's Bill provides that it shall be unlawful for a company to use the description or title of chemist or druggist. It is a matter of common knowledge that owing to the concentration of capital and the organisation of business on a large scale, limited companies and co-operative stores are able to supply pure drugs at reasonable prices to all classes of the community. The title of chemist is unquestionably an invaluable trade asset. The attempt to deprive companies and stores of this title is prompted not by any desire for the protection of the public, but with the sole idea of requiring for private chemists an exceedingly profitable monopoly at the expense of their trade rivals, and to the prejudice of the poorer classes. Parliament, however, is not concerned with these trade rivalries. It is concerned solely with the safety of the public. It has nothing to do with trade protection. By the Bill recommended by the Joint Select Committee companies may carry on business and use the title of chemist provided that in every shop or department a qualified chemist is in effective control. Companies are also brought within all the provisions of the Pharmacy Acts. A company will thus stand on precisely the same footing in respect of legal liability as a private chemist owning one or more shops. Obviously, therefore, so far as the public safety is affected it makes not the slightest difference whether a chemist's shop is owned by an individual or by a combination of individuals known as a limited company. No responsible person now proposes to prohibit such a combination from carrying on the trade of a chemist. To declare, therefore, that companies shall not hold themselves out as carrying on the business which they are legally entitled to carry on, and that they shall not describe themselves by any title or description indicating or implying the nature of that business would clearly be a denial of every sound principle of law and common-sense. May I respectfully urge you to resist this threatened interference with freedom of trade, so antagonistic to the trade interests of

the public, and to support the Bill recommended by the Joint Select Committee.

It is understood that before the Bill reaches the House of Commons it is likely that members of Parliament will receive another statement of the case from an entirely different point of view.

BAR-SOAP FOR THE NAVY.

In response to a question by Colonel Walker, who asked the First Lord of the Admiralty for the name of the firm whose contract was accepted for the supply of bar-soap to the Navy, and what was the price quoted for this year, last year, and the previous year, Mr. McKenna has stated: The desirability or otherwise of publishing the names of successful contractors is at present under consideration. Pending a general decision, there is no special reason in this case for stating to whom the contract was allotted in any of the years named. The prices are in all cases regarded as confidential in the public interests. In each of the years in question the contract was allotted to the firms who tendered lowest for suitable samples.

The Week's Poisonings.

THE fatalities from poisons during the week include ten suicides and four misadventures. The chief feature is the prominence of unscheduled poisons, to which over one-half of the deaths were due—none were caused by poisons in the first part of the Schedule. Of the ten cases of suicide, three are due to horticultural insecticides—George Arthur Warris, gardener, Sheffield, committed suicide by drinking insecticide. The Coroner, in his remarks, said he would have liked to see the label on the tin, the probability being that the stuff was described as non-poisonous, but that the deceased had evidently drunk a large quantity. Medical testimony showed that the deceased died from acute nicotine-poisoning.—A gardener named Hurst died from nicotine-poisoning as the result of taking fumigating solution. At the inquest Dr. Stevens said a small quantity of the concentrated solution would cause death in a very short time.—Maud James (24), domestic servant, Wimbledon, committed suicide with a poisonous insecticide obtained from her mistress's garden.—A blind basket-maker named John Wheatley, Lambeth, committed suicide by drinking hydrochloric acid.—Alfred Thomas Tilley (43), bargeman, died from sulphuretted hydrogen gas evolved from rubbish, etc., in the barge *Henry*, lying off Blackfriars Bridge.—Arthur Donald Charles (4), Kingham, near Tewkesbury, died from santonin poisoning. Mr. W. Jones, chemist and druggist, 147 High Street, supplied the child's parents with a chocolate worm-cake (P.J. Formula No. 203). The jury returned a verdict of santonin poisoning, but attached no blame to anyone.—Isaiah Stott (58), grocer, Rochdale, died from the effects of ammonia solution taken in the dark in mistake for beer.—William Cartwright (30), veterinary inspector, Burnley, committed suicide by taking poison at a Blackpool hotel.—At Manchester two fatalities from poison have occurred: a suicide with sulphuric acid and an accidental death as the result of an overdose of laudanum.—Mary Ann Smith (49) committed suicide by taking carbolic acid.—A verdict of suicide whilst insane was returned at the inquest on Elizabeth Thorpe, 38 St. Bartholomew's Close, London, E.C. A chemist had supplied the acid in a fluted poison-bottle properly labelled.—A hawker, called Albert White (40), Leicester, was found dead in Victoria Park on Sunday. An empty poison-bottle labelled "Laudanum" was found in his pocket. It had been obtained at a branch of Messrs. Wand, Ltd., but the address of the branch was not on the label, and the Coroner remarked that it should be.—James A. Keith, auctioneer, Elgin, committed suicide by swallowing a quantity of oxalic acid.

THE TITLE OF "CHEMIST."—"The Staffordshire Sentinel" for June 3 devoted an editorial article to "The Title of 'Chemist.'" This was a sympathetic exposition on the individual *v.* company controversy, and our contemporary supported the individual view of the matter.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., June 11.

THE markets have presented an inactive appearance this week, buyers continuing for the most part to restrict their wants to current requirements. About the only feature is the rise in opium, which is due to partial damage to the crop by drought, but to what extent is not known. Shellac is also dearer and in more active demand. Trade in chemicals is extremely slow. Ammonia sulphate is easier. Arsenic is plentiful and cheap. Hyposulphite of soda is in request and tending higher. Cream of tartar is easier. Soda tartarata and pulv. seidlitz have again been reduced in accordance with the easy tone in tartaric acid. Citric acid is quiet. A spell of warm weather should improve the consumption of these summer articles. Among crude drugs there have been few changes of consequence. Aconite and stavesacre are firmer. Curaçao aloes is likely to be cheaper. Buchu remains slow. Balsam Canada and guarana are scarce and dear. Japan wax is higher, but Carnauba is easier on spot. New French rose-petals are dear. The changes may be summarised as follows :

Higher	Firmer	Easier	Lower
Iron sulphate	Aconite	Ammonia sulphate	Pulv. seidlitz
Opium	Hypo. soda	Carnauba wax	Soda tart.
Shellac	Stavesacre	Cream of tartar	Turpentine
Vegetable wax (Jap.)	seed		

London Markets.

ACID, CITRIC, is steady and in fair request at 1s. 3d. to 1s. 3½d. for foreign, and at 1s. 3½d. for English.

ACID, TARTARIC.—The demand has improved considerably, but prices are unaltered at 10½d. per lb. for foreign and 10¾d. for English.

ACONITE.—German *Napellus* is rather firmer at from 39s. to 41s. 6d. per cwt. c.i.f.

ALOES.—Arrivals of Curaçao on the New York market have taken place freely, and there are offers for shipment at easier prices. The following figures show the quantities and declared values of aloes exported from Cape Colony during the years ended 1907 and 1906, also distinguishing the countries of destination :

	1907		1906	
	Quantity	Value	Quantity	Value
	lb.	£	lb.	£
United Kingdom ...	505,284	5,044	350,658	2,412
France ...	11,750	134	26,693	212
Germany ...	24,062	246	83,244	720
Italy ...	—	—	9,274	87
United States ...	35,002	310	66,822	558
	576,098	5,734	536,691	3,989

The exports from Cape Colony during the three months ending March 31, 1908, amounted to 131,707 lb. (valued at 1,209½l.) against 86,994 lb. (valued at 755½l.) in 1907.

ARSENIC is plentiful, and prices remain easy, English powdered offering at 18s. per cwt. net.

ASAFETIDA is quiet, as is usual at this period. Sales of common brown gum have been made at 40s. per cwt.

BELLADONNA ROOT.—Small sales of fair quality are reported at 65s. per cwt.

BENZOIN.—The arrivals this week amount to about 80 cases of Sumatra.

BUCHU.—The following figures show the quantities and declared values of buchu exported from Cape Colony during 1907 as compared with 1906, together with the countries of destination :

	1907		1906	
	Quantity	Value	Quantity	Value
	lb.	£	lb.	£
United Kingdom ...	270,033	8,562	272,941	7,322
Germany ...	21,301	639	12,465	330
United States ...	—	—	4,700	117
	291,334	9,201	290,106	7,769

The above figures are published by the South African Customs and Statistical Bureau. Although no shipments were made direct to the United States from Cape Colony, it is quite understood that considerable quantities are shipped to the U.S.A. on through B/L via Southampton, such transshipments being included in the U.K. figures.

The "New York Commercial" of May 28 reports that an arrival, which has been detained by the Government authorities for several weeks, has been refused admission on the ground that the bales should be marked "long buchu-leaves," and not simply "buchu-leaves." The lot will be returned, and probably re-shipped properly marked.

CAMPOR (CRUDE) is lower, business having been done in Chinese at 135s. c.i.f. for May-June and June-July shipment; spot value is 140s.

CAMPOR (REFINED).—Japanese is slow at 1s. 9d. per lb. for 1-oz. tablets on the spot.

COCAINE.—The stringency with regard to delivery still prevails among most makers, who are loath to buy crude at the higher prices asked. In consequence the market for hydrochloride is firm, with second-hand sellers at from 7s. 9d. to 8s. per oz. for good brands.

CREAM OF TARTAR.—Very slow and a shade easier, 98 per cent. being obtainable at 77s., and 95 per cent. at 75s. per cwt.

GALLS are quiet, with small sales of Persian blue at from 62s. to 65s. per cwt. spot.

GOLDEN SEAL.—Although prices have been reduced in the United States, there has been no reduction here, 8s. 6d. being still the quotation for fall-dug, but there is practically no inquiry here.

GUM ARABIC is quiet, with small sales of fair half-hard Soudan sorts at from 34s. to 35s. per cwt., and for shipment there are offers at 32s. c.i.f. Aden gum is scarce and wanted. Senegal is easier. In Persian so-called insoluble sorts there is little doing. The chief inquiry is for good, picked amber and Mohamerah, but buyers' idea of value is too low. Pale picked amber is offered at from 19s. to 20s., good ordinary sorts at from 11s. to 12s. 6d. per cwt., and Mohamerah at from 14s. 6d. to 20s. per cwt.

HELLEBORE.—Root is offered at 20s. for white, and powder at from 20s. to 25s.

HONEY.—New crop white Californian is offered at 44s. c.i.f. overland, or 42s. c.i.f. per sailer. There is a steady demand for honies generally.

INSECT FLOWERS.—Fine closed Dalmatian flowers of the new crop offer at from 90s. to 95s. per cwt., c.i.f. terms. The first lots of new crop have arrived in Trieste, and immediately found buyers at full prices. The yield of the new crop is estimated to be a much smaller one than in former years, in consequence of which a considerable rise in price for all grades took place, but it is expected that prices will be lower again later on.

IRON SULPHATE.—Increasing scarcity has led to a further

advance, business having been done at both 57s. 6d. and 60s. per ton.

OIL, ANISEED (STAR), is steady at from 4s. 5d. to 4s. 6d. per lb. spot, but for arrival 4s. 3½d. c.i.f. is quoted, being higher.

OIL, CASSIA, is unchanged and quiet, the spot value of 75 per cent. to 80 per cent. being 4s. 11d., 75 per cent. to 80 per cent. 4s. 9d., and 70 per cent. to 75 per cent. 4s. 8d. per lb.

OIL, LEMON.—Good brands sell on the spot at from 4s. to 4s. 3d. per lb., and for shipment 3s. 6d. to 3s. 9d. c.i.f. is quoted.

OIL, LIME, sells steadily at 2s. 4d. per lb. for West Indian distilled.

OIL, PEPPERMINT, is slow at from 6s. 6d. to 6s. 9d. per lb. for Wayne County in tins, and at 11s. for H.G.H. Japanese dementholised is also slow on the spot at 4s. 6d. for Kobayashi.

OIL, TURPENTINE, is lower on the week at 31s. per cwt. spot for American.

OPIMUM.—The position is dealt with in our editorial column. Despite the excitement which has prevailed in the Smyrna market, dealers here prefer to wait developments and more authentic news as to the crop before operating to any extent, especially as the news is of the usual conflicting character. Sales have consequently been small in the Turkey drug, the nominal quotations for good druggists being about 14s. 6d., Tokats 15s. to 18s., and Malatia 16s. per lb. In Persian opium the spot sales probably amount to about forty cases at rising prices—viz. from 12s. 6d. to 13s. 3d. as to test and condition.

A Smyrna correspondent writes on May 30 that, as the drought still persisted, speculators bought four cases at 118 pesetas, and as orders were sent from the interior to cease all sales, the market was consequently firmer. Fortunately rain has just fallen on the high levels and in the Karahissar district, and if nothing unforeseen occurs a fair crop is hoped for. Reports received from correspondents intimate that the Salonica and Balukesser crops are already satisfactory, and if rain sets in they will be particularly favourable. Another correspondent writes on May 30 that the case of extra Karahissar sold last week at 13s. was refused on inspection, and could not be replaced under 13s. 2d. After that, native speculators set to work to advance the price of prime Karahissar, which realised 113 and 119 pesetas. These conditions were induced by the drought, and prices might have advanced still further if telegrams from the producing centres had not announced that rain was beginning to fall. It is true that there has not been sufficient rain to completely avert danger, but the poppy has been strengthened to some extent, and as the sky remains cloudy it is hoped that there will be more rain, in which case the crop may be estimated at 5,000 cases to 6,000 cases, which, with the stocks already in hand, would be sufficient to meet the demand. The arrivals amount to 1,387 cases, against 3,233 cases last year on the same date. The sales comprise seven cases, including five cases prime Karahissar t.q. at the equivalent of 12s. 10d., one case extra Karahissar at 13s. 2d., and one case prime Karahissar at 12s. 2d. per lb. c.i.f. European ports. The stock in Smyrna consists of about 1,728 cases, against 1,166 last year, and in Constantinople to 68 cases, against 65 cases.

Another Smyrna correspondent writes on June 5 that the weather throughout the week has continued dry, with further news from the interior reporting damage. Holders refuse to do business even at higher rates, and the only sale we have to report is 12 cases current qualities at 13s. 3d. for the States. The arrivals of new opium to date amount to nine cases, against *nil* at the same period last year.

Mr. H. A. Holstein, of Constantinople, states, in a report to his agents Messrs. Domeier & Co., that in the Karahissar district there have been sufficient rains, and he anticipates a satisfactory crop. He advises his clients to abstain from buying until July, when the new crop will be on the market.

QUININE is steady and unchanged at 7½d. for B. & S. and/or Brunswick, 7½d. for Amsterdam, and 7½d. per oz. for Java, but no business is reported on speculative account.

The Amsterdam Quinine-works will offer 50,000 oz. B.P. sulphate of quinine on Friday, June 19.

ROSE PETALS.—The new French petals are just on the market, and, as usual, at the opening high prices are asked—viz. 210s. per cwt. c.i.f.

SARSAPARILLA.—Twenty-one bales of grey Jamaica have arrived, and a further twelve are close at hand; six of native red Jamaica have also been received.

SEIDLITZ POWDER.—On Friday last the makers again reduced their prices, and now offer 5-cwt. casks at 58s. per cwt., and 28-lb. parcels at 60s. 3d. per cwt., being a reduction of 3s. 6d. to 4s.

SHELLAC is dearer. Since the holidays a good spot business has taken place, principally for U.S.A. account, fully 500 cases having changed hands, mostly of the common grades of second orange, at up to 109s., fair to good free T.N. realising from 117s. to 120s. Good and fine orange marks are held for higher prices, fine to extra fine at 150s. to 160s., middling 130s. to 135s., matted 125s., and A. C. Garnet 110s. Futures are dearer, the sales including August at 120s. to 127s., October 122s. to 130s., and December 123s. to 131s.; and for arrival the sales include 300 cases of T.N. at from 115s. to 120s., c.i.f. terms.

SODA HYPOSULPHITE.—Owing to the fact that two makers are out of the market, the position is regarded as firm, and in one direction prices for ordinary foreign have been advanced by 5s. per ton, the quotation for large crystals in casks being 5l. 10s. per ton ex wharf, and for pea-crystals from 7l. 2s. 6d. to 7l. 5s. in ton lots is quoted.

SODA TARTARATE.—Prices have undergone a further reduction of 6s. per cwt., the price of English powder or crystals in 5-cwt. casks being 68s., and 28-lb. parcels 71s. per cwt.

SPICES.—Owing to the holidays the usual weekly auctions were not held. Privately the demand continues slow. On the spot fair Singapore *Pepper* is offered at 3¼d., and June-August shipment at 3½d. c.i.f. *White pepper* is quiet at 5½d. for fair Singapore, and at 4½d. for fair Penang. For arrival, July-September shipment has been sold in fair quantity at 4¾d. c.i.f. delivered weight. On the spot small sales of Zanzibar *Cloves* have been made at 4¾d. to 4½d. per lb. The market for delivery is inactive, and quotations are unchanged, with sellers of June-August at 4½d., August-October at 4½d., and October-December at 4½d. For arrival January-March shipment is quoted at 5½d. c.i.f. delivered weight.

STAVESACRE-SEED are firmer at from 50s. to 52s. 6d. per cwt. c.i.f.

STRAMONIUM LEAVES of the new crop are reported to be rising on the Trieste market, as the farmers report a smaller output owing to lack of rain, so that future prices will be regulated by the extent of supplies.

THYMOL.—It is reported that the price of thyme-seed has advanced in India, and that higher rates for thymol must eventually follow. Meanwhile there is little abatement on the keen competition between the principal makers, who quote from 6s. 9d. to 7s. per lb.

TRAGACANTH has been in fair demand for practically all grades. Persian having been sold up to 8l. 10s. per cwt., being steady, and for Bagdad full prices have been paid for medium and better qualities. Bagdad firsts are quoted 15l. to 16l. 10s.; seconds, 13l. to 14l.; thirds, 11l. to 12l. 10s.; and fourths, 9l. 10s. to 10l. 10s. per cwt.

TURMERIC.—Small sales of middling to fair Madras finger have been made at from 20s. to 21s. per cwt. Cochin split bulbs have been sold at 13s., and Bengal is slow at from 19s. to 19s. 6d. per cwt.

WAX, CARNAUBA, is easier at from 99s. to 100s. per cwt. for waxy grey, and 105s. for ordinary yellow.

WAX, JAPAN.—The stocks on the spot are extremely small, with sales up to 50s.

Heavy Chemicals.

Business in the heavy-chemical market continues to be of a very slow nature, and has, of course, been made worse by the interference of the holidays. There seems to be an idea, however, that an increased activity is imminent, and it is to be hoped that such is actually the case. A fair export demand is being experienced, and values are fairly well maintained.

SULPHATE OF AMMONIA.—This market is very quiet on both prompt and forward account, and the general tone continues in buyers' favour. Present nearest figures are: Beckton, 12l. 3s. 9d. to 12l. 5s.; Beckton terms, 12l.; London, 12l.; Leith prompt, 12l. 5s.; and Hull, 12l.

ACIDS are without fluctuation, and continue in fair consumptive demand. Nitric, 34° Tw., 16l. 10s. to 17l. per ton, and 80° Tw., 14l. 15s. to 15l. 10s. per ton. Sulphuric acid, 168° Tw., 60s. to 62s. 6d. per ton, and 150° Tw., 30s. to 32s. 6d. per ton, all naked. Hydrochloric acid, 2s. 3d. to 2s. 6d. per bottle.

SUPERPHOSPHATES OF LIME are in fair average demand, both on home and export account, and values stand unaltered at 47s. 6d. to 52s. 6d. per ton, f.o.r. or f.o.b., on the basis of 26 per cent. and with customary extras for higher strengths.

SULPHOCYANIDES are still on the quiet side at late rates. Potassium, 6½d. to 7d. per lb.; ammonium, 95-per-cent., 6½d. to 6¾d. per lb.; and barium, 95-per-cent., 3½d. to 3½d. per lb.

POTASSIUM SALTS are only in quiet demand at present. Carbonate, 90-per-cent., 19l. to 19l. 5s. and 96 to 98 per cent., 25l. to 25l. 10s. per ton. Caustic potash, 90-per-cent., 23l. 15s. to 24l. 5s., and 75 to 80 per cent., 20l. 10s. to 21l. Sulphate, 90-per-cent., 9l. 5s. to 9l. 10s. Muriate, 80-per-cent., 8l. 15s. to 9l. Saltpetre, refined, barrels, 23l. 15s. to 24l. Permanganate, 36l. to 36l. 10s.

GREEN COPPERAS maintains a very steady tone, and is in good demand. Best Lancashire makes, 42s. 6d. to 45s. per ton f.o.b. Liverpool, and Welsh, 17s. to 19s. per ton in bulk free on rails.

Alpes Maritimes Crops.

(By the "C. & D." Correspondent.)

Grasse, May 30.

ORANGE.—The distillation of orange-blossoms is now at an end in the principal factories. As we have intimated, the season has been a very short one, lasting little more than eight days, so that the flowers obtained fall short of the quantity required to supply the necessary amount of neroli for perfumers. On the whole, the yield from the blossoms has been better than in former years, but certain perfumers, taken aback by the abrupt stoppage of supplies, are of opinion that the crop is below the average, and that the stock of neroli already in hand will hardly be sufficient to cover the needs of consumers until the arrival of the new. The demand for neroli is increasing more and more. Quotations for the new crop will be announced during the course of the week.

ROSE.—Many fears have been expressed lately by rose-producers. In consequence of the drought, the crop is very late, and up till now it has been none too plentiful, but, thanks to the rain which has set in during the last few days, supplies will probably increase. The crop, however, will not be as good as those of the two former years, though prices will probably remain unchanged, as there is a fair amount of stock to make up the deficit.

MIGNONETTE.—The crop is almost over, and it has not been a good one. Prices will probably be pretty much the same as those which prevailed in previous years.

Continental Drug and Chemical Markets.

AMMON. CARB.—Prices are well maintained by English manufacturers, who, in spite of the high import duty, can still compete with German producers. German prices are now more in accordance with the higher value, although there is still a good deal of material available from cheaper contracts in second-hands, which will be quite sufficient to cover the summer demand.

ARABOA.—New shipments have added to the stocks already in hand, so that there is an abundant supply. Nevertheless, prices are still maintained at about 550m. per 100 kilos.

ARSENIC.—For several months there has been no demand whatever for refined arsenic; some time ago a decline became apparent, and a further reduction has lately set in, powdered being obtainable at 49m. to 50m. per 100 kilos. Prices for lump arsenic are maintained at a considerably higher level.

BALSAM PERT.—In consequence of the small demand, prices, which had been forced up in producing centres, have declined slowly but surely in Hamburg, so that quotations are now at about 15m. per kilo.; it seems probable that they will decline still further.

BORAX AND BORIC ACID.—As a result of various contracts which had to be taken up, there have been offers in the market of late for considerable quantities below convention prices.

CAMPHOR.—In spite of the very good demand for refined, prices have declined still further. Japanese refined camphor, which can be bought at 400m. to 420m., exercises a depressing influence on the market, and as long as these conditions continue prices for the German product in bells will remain at a low level.

CITRIC ACID.—The fears which were formerly expressed as to whether the supply of raw material would be sufficient to meet the season's demand are now being realised. Inland factories have disposed of their production for the first summer months, but the demand has not yet been covered. If it increases owing to the hot weather, there will be a scarcity of acid and an advance in prices, independent of the raw material.

ERGOT.—For some months there has been very little demand. Various lots of Russian have been sold at 175m. per 100 kilos., but as a rule only small sales have been effected. Spanish

is obtainable at about the same price, and there have also been forced sales of ergot. On the whole, the tendency is to refrain from buying more than is absolutely necessary until the new crop comes in.

GLYCERIN.—The convention is extending outside Germany to a number of other European countries. Since the reduction which set in some time ago, the lower offers from second-hands and from "outside" firms have almost ceased, and general conditions appear to be firmer.

MILK-SUGAR.—For some time the principal German factories have been controlled by a convention, but lately competition became apparent here and there, and although the product offered was not always of irreproachable quality, yet the prices were considerably lower, so that finally a general reduction in price became necessary. Quotations have consequently been lowered by 6m. per 100 kilos.

OXALIC ACID.—The German market is very weak; there is little demand, and sellers who have large contracts are offering on very low terms and sometimes selling with practically no profit. In consequence of these conditions the product can be obtained very cheaply from second-hands.

PLATINUM AND SALTS.—The price of metal has declined still further, quotations being now at about 3,000m. per kilos. Prices for the salts have also been lowered, and sharp competition has become apparent, which decreases the value of the product.

SANTONIN.—The persistent depreciation of wormseed affects the santonin market. Although present quotations do not as yet quite correspond to the low prices for the seed, yet it would appear that the santonin-makers still control large supplies of dear raw material which do not admit of a reduction in price for santonin.

Cablegrams.

SMYRNA, June 9 :—The opium crop is estimated at 3,000 cases. Buyers for the United States have paid the equivalent of 15s. per lb. for good druggists' quality, and with few sellers the market, it is expected, will advance to 16s.

SMYRNA, June 12 :—Sales of Karahissar opium amounting to 50 cases have been made for American account at the equivalent of 15s. 3d. per lb. Market is firm.

NEW YORK :—Business in drugs is moderate. Opium has advanced 20c. to \$4.70 per lb. for druggists' by single cases. Wayne County peppermint oil in tins is 10c. lower at \$1.45 per lb. Spearmint oil has declined by 6c. per lb. Cascara sagrada continues easy at 6½c. per lb., and golden seal (hydrastis) is quiet at last week's reduction to \$1.85.

BERGEN, June 10 :—The total catch of cod for the whole of Norway since the opening of the season amounts to 43,744,000, against 44,887,000 at the corresponding period of last year, and the production of steam-refined oil has now reached 47,790 barrels, as compared with 38,311 barrels at the same time last year. Stormy weather at Finnmarken has interfered with the fishing, which, it will be seen, is poor when compared with last week's figures. The market for finest non-congealing Lofoten oil is quiet at the equivalent of 53s. per barrel f.o.b. Bergen.

AMSTERDAM, June 11 :—At the auctions of cinchona held here to-day 7,743 packages were offered, of which 6,462 sold at the average unit of 3.52c. per half-kilo., against 3.55c. paid at the May auction. The following were the approximate quantities of quinine purchased by the various factories: (1) The English and American factories, 12,119 kilos.; (2) the Brunswick factory, 4,129 kilos.; (3) the Mannheim factory, 5,035 kilos.; (4) the Amsterdam factory, 925 kilos.; (5) the Frankfurt and Stuttgart factories, 2,511 kilos.; (6) the Maarsse factory, 2,914 kilos.; (7) various buyers, 7,193 kilos. The lowest price paid for manufacturing bark was 7½c. per half-kilo., and the highest, 33½c.; while for druggists' bark from 13½c. to 42½c. was paid. Practically all the coca-leaves were disposed of at from 22c. to 36½c. per half-kilo.

Sicilian Olive-oil Crop.

The British Vice-Consul at Messina (Mr. A. J. Ogston) reports that the olive-oil crop in that province in 1907 was, on the whole, good in quantity, though somewhat inferior in quality, with some exceptions. The total output amounted to approximately 180,000 metric quintals, or 18,000 metric tons, of which 14,400 tons were edible and 3,600 tons for burning and industrial purposes. The oil of the first quality, which sold at 90c. per kilo., or 4d. per lb., was exported to Russia, the United States, Great Britain, Sweden, and Spain, and that of the second quality was sold at 70c. per kilo., or about 3d. per lb. This latter is little superior to the third

quality, or machinery oil, which was exported in 1907-8 to Great Britain, Austria, Holland, and the United States. High prices prevailed, partly owing, it is said, to the large quantities ordered beforehand by emigrants to the United States. The olives are grown in Messina by private individuals, there being no large associations.

Formosa Camphor.

H.M. Consul at Tamsui reports that the total exports of camphor from Formosa in 1907 amounted to 4,121,566 lb., of which 2,452,933 lb. was sent to Havre, London, and Hamburg, 1,635,300 lb. to America, and 33,333 lb. to Madras. Of this amount 1,079,733 lb. (1,046,400 lb. for America and 33,333 lb. for Madras) was shipped by local steamers from Keelung for transshipment at Kobe. Thus no camphor was ultimately destined for Japan. It is reported that there was a large increase in the camphor manufactured by the camphor monopoly in 1907, as compared with 1906, the figures being 5,388,918 lb., as against 4,040,838 lb., an increase of 1,347,979 lb. By the latest returns the production of camphor oil has nearly doubled in 1907, being 6,710,390 lb., as against 3,610,645 lb. in 1906. Hitherto all the camphor oil has been shipped to Kobe to be converted into refined camphor, but in the fiscal year commencing April 1908 a sum of about 14,000, was to appear in the estimates to meet the expense of erecting a refinery in Taihoku, the capital of Formosa, and in future the camphor will undergo the necessary process there. It is said that a new method of distillation has been discovered, and that by this method as well as by the saving of expense in transport a considerable economy will be effected.

The American Situation.

The opinion prevails among those best qualified to judge that an improvement will take place in business during the second half of the year. The general feeling in the United States is that when the Republican Convention (which takes place in July) has been held, and the candidate nominated, a feeling of more confidence will be at once shown, especially if Mr. Roosevelt retires from the field. It may be pointed out that the prices of many products (especially chemicals) are now low and tempting. It is therefore urged that buyers should not refrain from purchasing their reasonable requirements, as in the event of the United States again entering the market later, an improvement in prices may be possible.

Russian Liquorice-root.

H.M. Consul at Batoum reports that the liquorice-root industry and trade of the Caucasus was fairly prosperous in 1907, and the root collected during the 1906-7 season was shipped from Batoum to the United States under favourable conditions. The industry is gradually extending outside the limits of the area within which it has been collected for so many years in the Trans-Caucasus, and root of good quality is now also found in the Kouban district, Northern Caucasus. Very extensive liquorice-root plains likewise exist in the Trans-Caspian district along the banks of the river Amudarya. The locality will, it is said, probably come to the front in the near future, seeing that its importance as a field for furnishing supplies to the pressing factories on the spot is beyond dispute. The quality of the root is also good, and the fields are inexhaustible. An important question, however, is that of transport. Should the railway and steamer rates for the conveyance of the root through Trans-Caspia, across the Caspian Sea, and again by rail through the Caucasus to the seaboard not be excessive, it is possible, says the Consul, that the root can be carried over the great distance at a rate which will allow of a margin of profit when delivered at Batoum.

Berry-wax.

Some interesting information in regard to the collection and export of berry-wax has been submitted to the Cape Town Chamber of Commerce in the form of a report from the Produce Trade Committee. Readers of this journal have been made familiar with this product from time to time; but as special pains have recently been taken to ascertain how the industry stands commercially in Cape Colony, it may be as well to state the facts concisely. It appears that the Cape Town Chamber of Commerce and the Department of Agriculture are at variance in regard to the present method of collecting the wax-berries. As it is, the Government offer the right to collect these berries on the Cape Flats, and the highest tenderer is always given the lease. The Government adds that this course has not resulted in a decrease in the quantity of wax exported, and that they are unable to depart from the present policy, which, it is contended, shows a fair return (40% per annum) to the Government. On the other hand, the Chamber point out that previous to the Government control berry-wax was collected for some years by coloured people, who readily sold it in Cape Town at 4½d. per lb., but now that the article has been extensively advertised by the Government, and buyers have received the impression that hundreds

of tons are available, the price has depreciated, resulting in loss to the poor class of people who used to make a livelihood out of the industry. These people are now prohibited from collecting the wax on Crown lands, except with the consent of the lessee, and they obtain from him about 1½d. per lb. less than they formerly received, which does not repay the labour of picking. The Chamber recommend that the present system be discontinued forthwith, all permits to be free of charge to applicants, but the Department of Agriculture, as already indicated, do not see their way to depart from their system of tender. From the returns published by the Customs Statistical Bureau, it would appear that during 1906 4,216 lb. of berry-wax were exported, the average price realised being 6½d. per lb., while during the first nine months of 1907 8,666 lb. were exported at an average price of 5½d. The Chamber point out, however, that the 1906 figures must be inaccurate, as one firm alone exported from Cape Town no less than 12,440 lb. during that year.

London Drug Statistics.

The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of May 1908, and to the stocks on May 31.

	May		Stocks		1908	
	Landed	Delivd.	1908	1907	Imptrtd.	Delivd.
Aloes.....cs, etc.	294	206	243	163	703	724
".....gourds	—	—	1,371	179	472	652
Aniseed, star.....cs.	—	—	—	—	—	—
Arrowroot.....pkgs.	2,238	1,413	9,180	6,290	8,323	4,905
Balsams.....cks, etc.	204	144	476	680	357	338
Calumba.....bgs.	—	31	166	491	5	348
Camphor.....pkgs.	742	932	1,430	3,264	3,963	5,248
Cardamoms....."	331	349	1,502	2,607	1,362	1,617
Cinchona....."	504	255	4,746	4,732	1,766	1,991
Cocculus indicus....."	—	—	17	90	—	—
Cochineal....."	58	47	694	380	254	186
".....bgs.	—	2	186	447	—	—
Cubebs....."	—	20	100	61	104	65
Dragon's-blood.....cs.	61	24	—	—	—	—
Galls.....pkgs.	24	313	1,977	2,639	1,464	1,133
Gums—	—	—	—	—	—	—
Ammoniacum....."	—	—	10	23	—	1
Animi....."	90	148	233	150	472	413
Arabic....."	1,516	579	6,038	8,911	3,644	4,414
Asafetida....."	64	90	371	338	340	318
Benzoin....."	93	129	407	1,073	455	751
Copal....."	4,015	3,679	16,504	14,393	17,544	17,890
Damar....."	255	435	2,014	2,550	2,283	2,735
Galbanum....."	—	—	—	—	—	—
Gamboge....."	20	11	83	55	73	65
Guaiacum....."	33	5	69	54	41	14
Kauri.....tons net	28	116	565	1,180	542	603
Kino.....pkgs.	3	2	53	51	3	10
Mastic....."	—	—	11	32	12	2
Myrrh, E.I....."	36	65	321	293	316	208
Olibanum....."	39	66	1,243	1,720	673	508
Sandarac....."	225	162	462	529	731	573
Tragacanth....."	131	1,063	4,926	6,576	5,707	4,966
Ipecacuanha—	—	—	—	—	—	—
Cartagena....."	—	6	43	108	32	44
E.I. ("Johore")....."	1	14	19	9	44	80
Matto Grosso....."	20	15	48	81	62	86
Minas....."	13	18	36	64	16	54
Jalap.....bbs.	13	21	6	19	35	51
Nux vomica.....pkgs.	202	79	613	118	1,045	467
Oils—	—	—	—	—	—	—
*Aniseed, star.....cs.	—	10	21	31	30	30
*Cassia....."	20	2	64	42	90	49
Castor.....pkgs.	54	76	281	299	585	614
Coconut.....tons	312	263	503	374	1,129	907
Olive.....pkgs.	509	556	1,742	3,385	1,979	1,648
Palm.....tons	9	7	8	11	12	15
Quinine.....lb.	—	3,518	208,811	225,548	4,999	16,908
Rhubarb.....cs.	—	92	356	174	144	361
Sarsaparilla.....bbs.	117	83	244	192	499	459
Senna.....pkgs.	135	198	390	1,069	1,051	1,460
Shellac.....cs.	3,614	4,265	31,872	13,942	25,010	18,065
Turmeric.....tons	31	16	308	274	88	113
Wax—	—	—	—	—	—	—
Bees'.....pkgs.	344	298	1,313	1,780	1,434	2,053
Vegetable....."	25	75	152	216	240	333

* Stocks of essential oils at Smith's Wharf and Brewer's Quay are not included.

"I enclose cheque value 10s. for subscription to C. & D. Since I stopped taking it in I have felt quite out of touch with everything in our line." So writes a Newcastle chemist (48/6).

TRAVELLER (patting chemist's dog): "That's a good dog, Mr. —." Precocious Apprentice (interrupting): "I saw him kicking it when he was waiting outside for —'s traveller to go." There was no order that day.

Commercial and Produce Notes.

Proposed Produce-auctions in Ceylon.

The desirability of holding public auctions for such produce as cacao, cardamoms, croton, pepper, annatto, and vanilla is still being discussed in the Ceylon Press. There is a feeling among planters that the minor products are not sufficiently open to competition, and that they do not always get full value for this merchandise under the present method of private sale. To make the auctions a success, however, it would be necessary to guarantee a sufficient quantity to make the sales attractive. On this point information is now being collected by a sub-committee of the Planters' Association, who have circularised the Colombo agents, asking them to give the total amounts of the various products at their disposal from the estates in their agency. Further developments are awaited with interest.

Florida Camphor.

The American Camphor Forest and Products Co. has just been incorporated under the laws of the State of New York, with a capital of \$200,000, having for its object the cultivation of camphor trees in Polk County, Florida. It is claimed, says the New York "Journal of Commerce," that the company has on its premises 500,000 trees, ranging from one to three years old, which are in a healthy, flourishing condition.

Mr. S. Lewy, the proprietor of the Lewy Chemical Co., who is to be the president, has made the following statement: "It is not the desire to make public at this time our board of directors, but we will have upon it prominent drug men. Upon analysis of the company's expert chemists and the chemists of the plant industry of the United States Agricultural Department it has been definitely ascertained that the camphor trees in Florida contain a high grade of pure gum camphor. Upon tests made in the laboratory of the United States Agricultural Department a quantity of camphor was abstracted from the trees grown in Florida, and the trees will flourish, as the soil, climate, and physical condition are well adapted to their cultivation."

Stallman & Fulton Co.'s Affairs.

A further statement has been issued by the committee appointed to liquidate this estate which shows—

Total sales of collateral for account of secured creditors	\$89,540.08
Total sales of merchandise unpledged	38,663.79
Accounts receivable, due and collectable	20,500.00
Cash on hand, in banks at interest	49,066.23

These items relate to the New York branch only, and show the sale of considerably more than half the American stock. The drug-market has been unfavourable to rapid liquidation, and the tendency of values has been steadily downwards. The prices realised, however, have thus far been fairly good, and have averaged up to the committee's valuations. But there has been a considerable shrinkage in portions of the merchandise originally on hand which were not covered by the committee's actual appraisal, for the reason that they were held at distant points or in inaccessible places. This stock had to be taken at valuations based on the company's records, and these have turned out in many cases to be far in excess of sale values. There has also been a severe shrinkage in the proceeds, particularly in those from pledged stock, on account of heavy accumulations of storage charges. . . . The total saving in rentals, salaries, and other fixed expenses is, roundly, about \$1,000 per month. The progress of the liquidation at the London branch is satisfactory. About three-fourths of the merchandise has been sold, the greater part for account of secured creditors. Details have not been received, but the prices realised appear to have been good, and no increase is apparent in the net deficiency originally reported. . . . The affairs of the estate are now in such shape that the committee feels warranted in advising the assignee to declare and pay the first dividend as soon as possible after all claims have been proved.

Spanish Olive Oil.

A new process for obtaining olive oil without hydraulic pressure has recently been discovered in Seville. The inventor is the Marquis von Acapulco, and, according to a Spanish paper, the method consists in reducing the olives to a pulp, out of which the oil is extracted. The olives are prepared in a conical cylinder, where the stones are separated from the pulp by a rotating vertical press; the pulp then falls out of the cylinder on to a strong wire netting under which a suction-pump is set to work, so that owing to the atmospheric pressure the oil begins to flow out of the pulp. By this method about 40 per cent. of the oil can be extracted, and afterwards hot water or steam is introduced into the

cylinder, and by this means the remainder of the oil is obtained, as oil of the second or third pressing. After testing it has been found that Acapulco's process is an improvement on the old method, and, according to Professor Diego Pequeno, of Madrid, the good results which have been obtained are mainly due to the fact that in the new process there is no separation of the mass into liquid and solid, and the discharge-pipe is therefore not choked up by the pulp, as was often the case with the old method. A company has already been formed for the exploitation of Acapulco's patent, and factories are to be established in different parts of Spain.

Shellac.

The following statement collates the figures relating to the exports of shellac, button-lac, stick and seed lac from India:

	1904-5	1905-6	1906-7
	Cwt.	Cwt.	Cwt.
Shellac	193,305	217,593	205,461
Button-lac	34,276	41,851	37,117
	227,581	259,444	242,578
Stick and seed lac	11,152	11,004	15,188

A given quantity of stick and seed lac such as is exported may be taken as equivalent to half that quantity of shell or button lac. The highest price for shellac in 1906-7 was Rs. 155.3 per cwt. in September 1906, and the lowest Rs. 126.9 in April 1906. The United States maintained and confirmed its leading position as a buyer of shellac and button-lac, and took lac to the value of Rs. 167.95 lakhs, as compared with Rs. 149.52 lakhs in the previous year. The United Kingdom reduced her demand from Rs. 94.24 lakhs to Rs. 91.47 lakhs, while Germany took Rs. 58.66 lakhs, against Rs. 44 lakhs in 1905-6. Considerable official interest has been taken in the problems of such cultivation and harvesting of lac as would secure the future of the crop during last year. The results so far are encouraging, though it is impossible to say whether any measures for the conservation of the industry are necessary.

West African Products.

A recent issue of the "Bulletin of the Imperial Institute" contained some interesting notes on samples of kola and copal resin from the Gold Coast and ginger from Sierra Leone. The kola (white and red) was submitted to experts, who valued the samples at about 1½d. per lb., as they were small and musty. Most of the seeds were whole, whereas buyers prefer them split. The results of the chemical examination show that there is little difference in the amount of caffeine present in the white and red varieties, and that the seeds do not deteriorate on drying, as the proportion of caffeine calculated on the dry material is a little higher in the dry than in the fresh seed. Two samples of ginger were forwarded from Sierra Leone for examination, one (a) consisting of ½ cwt. purchased from a trader just previous to shipment and representing the product as generally prepared in Sierra Leone, and the other (b) consisting of a similar quantity of dried ginger specially prepared by Mr. Abayomi Cole. The first sample (a) was dirty brown in colour and rather mouldy, untrimmed, and unpeeled. The aroma was strong and the taste pungent, but the mouldy odour was also noticeable. Commercial experts valued (a) at 18s. to 20s. per cwt., and (b), prepared by the improved process, at 24s. to 30s. It is therefore clear that the sample prepared by Mr. Cole's method is distinctly superior in value to that generally produced in Sierra Leone, and it is therefore desirable that the preparation of ginger by this new process should be encouraged in the Colony. Three samples of copal resin forwarded from Ashanti were valued at 60s., 50s., and 30s. per cwt. respectively. Varnish-manufacturers point out that moderate quantities of copal were formerly received from the Gold Coast, but, owing to the diminution of supplies, makers turned their attention to other varieties of copal which can be regularly obtained in large quantities. Accra copal, the name by which the Gold Coast resin is known in the market, has so far never been held in high favour in consequence of the unsatisfactory way in which it has been shipped. The resin is usually sent in the rough state, with a large quantity of dust and dirt mixed with it, no attempt being made to separate the different qualities. On the other hand, Congo copals, which are now largely used, are more or less graded for colour and size.

THE USE of sulphate of copper in Greece for agricultural purposes is still increasing, the imports into Corfu for 1907 amounting to 111 tons, an increase of 71 tons on last year. It is chiefly obtained from the United Kingdom.

Reviews.

Studies in Laboratory Work. By C. W. DANIELS, M.B.Camb., M.R.C.S.Eng., and A. T. STANTON, M.D.Tor., M.R.C.S.Eng. Second edition. 8 $\frac{3}{4}$ ×5 $\frac{3}{4}$. Pp. 491. 16s. net. (London: Bale, Sons & Danielsson, Ltd., Great Titchfield Street, W.)

"The object of this work is to assist practitioners in the Tropics in the application of simple laboratory methods to the practice of medicine." This, the first sentence from the preface, explains the somewhat obscure title of the book. The authors are connected with the London School of Tropical Medicine, and between them have produced a book which must become the standard work on the subject with research workers on tropical diseases. It begins with a description of the fitting-up of a laboratory and particulars of the instruments and apparatus needed. Then follow chapters on microscopic technics and the methods of taking and examining blood films. The main portion of the book is, however, devoted to the classification and identification of the parasites found in the blood, the examination of blood-sucking insects, which it is now recognised are the media for the transmission of most forms of tropical disease, and the examination of human excreta. The illustrations are beautifully drawn, and the coloured plates at the end of the volume are some of the finest of their kind we have ever seen. We have nothing but praise for the book, but suggest that the title be revised in the next edition, as "laboratory work" is very vague, and conveys different meanings to different sections of scientific workers.

The Treatment of Paper for Special Purposes: A Practical Introduction to the Preparation of Paper-products for a Great Variety of Purposes. By LOUIS EDGAR ANDÉS. Translated from the German by CHAS. SALTER. 7 $\frac{1}{4}$ ×4 $\frac{3}{4}$. Pp. 239. 6s. net. (London: Scott, Greenwood & Co., 8 Broadway, Ludgate Hill, E.C.)

At first sight one would hardly think that the subject offered sufficient scope for a book, but it is obvious on looking through the work that paper is the basis of innumerable processes. At the beginning the various kinds of parchment papers are dealt with, then transfer papers, packing and preserving papers, fireproof and safety papers, paper articles, gummed paper, hectograph paper, insecticide paper, leather paper, photographic and lithographic paper, blotting paper, medicated paper, tracing and waterproof paper, test paper, emery paper, and miscellaneous papers, such as barometer papers and magic pictures. We naturally judge the book by turning to those sections which chemists would require to use. The fly-papers are made with (a) saccharin, "greedily consumed by flies, on which it acts as a fatal poison"; (b) quassia, colocynth, and pepper; (c) quassia and sugar; (d) pepper and sugar; (e) arsenic and colocynth; potassium bichromate and pepper; turpentine, castor oil, and syrup. The recipes are not always intelligently handled; for instance, the last mixture is to be "dissolved in warm water," and the quassia chips are "suffused" with water. In the medicated-papers section there are two gout papers (one is a resin and wax mixture with cantharides and euphorbium, and the other a kind of pitch-plaster); an anti-asthma paper with "a trace of alcoholic extract of lobelia"; mustard-paper and iodine-paper. We have also read a good many other portions of the book, and although several of the expressions and ideas will make a chemist smile, there is much that is suggestive and capable of being turned to account.

Lectures on Massage and Electricity in the Treatment of Disease. By THOMAS STRETCH DOWSE, M.D. (Bristol: John Wright & Co.)

This book of sixteen lectures, running to 446 pages, may be regarded as a full and fair statement of the case for massage by one of its earliest practitioners. It possesses an interest for pharmacists who want to know what can be said for methods of treatment other than medicinal. There is much in it that is physiological, especially relating to nerves and the circulatory system, and if the reasoning is now and then a little far-fetched it still cannot fail to interest. Methods are well described, and a careful reader could set to work after mastering this book. We are much

interested to note that the author still adheres to the definition of massage which he gave many years ago in an article in Wright's "Medical Annual": "The application of sentient living matter to sentient living matter." Those living in a circle of thought where exact science reigns will hardly see the relevance of *sentience* in the applier, and yet the author's faint praise of vibratory massage is in keeping with his definition. The figures descriptive of motor points on the surface of the body are well arranged and very instructive. The description of the Weir-Mitchell rest-cure is highly interesting. A chapter on the electric testing of nerve and muscle is well done; so is that on galvanic and faradic treatment. High frequency is not well described, and the portion on X-rays and Finsen-light should have been either omitted or improved. There is evidence of carelessness in proof-reading on pages 422 and 423, where, under "Photographs of Screen Images" part of the *technique* of direct radiography is given.

New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Atkinson, Stanley B. *The Law in General Practice.* Some chapters in Everyday Forensic Medicine. 7 $\frac{1}{2}$ ×5. Pp. 248. 7s. 6d. net. (H. Frowde.)

Church, Arthur H. *Types of Floral Mechanism.* Diagrams and Descriptions of Common Flowers arranged as an Introduction to the Systematic Study of Angiosperms. Part 1, Types 1-12, January to April. 4to. Pp. 218. 21s. net (Clarendon Press). (Frowde.)

Elgie, T. H. *Metric Ready Reckoner.* 11 $\frac{3}{4}$ ×8 $\frac{1}{4}$. Pp. 8. 2s. 6d. (E. Wilson, 54 Threadneedle Street, London, E.C.) [This consists of a series of conversion tables printed on card-board and linen hinged. The tables are for tons and cwt. into kilos; quarters and pounds into kilos; ounces into grams; inches into millimetres; cwt. and quarters into kilos; tons into kilos; miles into kilometres; acres into hectares; yards and feet into metres; bushels into hectolitres; gallons into litres; cubic yards into cubic metres; square inches into square centimetres; square feet into square metres; kilos into cwt., quarters, and pounds; kilograms into pounds; grams into ounces; kilometres into miles; centimetres into inches; metres into feet and inches; cubic metres into cubic feet; litres into gallons; square metres into square yards; hectolitres into bushels; and a fraction table.]

Factory Glazes for Ceramic Engineers. Section A of the Series Leadless Sanitary Glazes by a West-Riding Expert. Folio. 42s. net. (Spon.)

Green, Charles Leedham. *The Treatment of Gonorrhœa in the Male.* 2nd edit. 8 $\frac{3}{4}$ ×5 $\frac{3}{4}$. Pp. 172. 5s. net. (Baillière.)

Harker, Alfred. *Petrology for Students: An Introduction to the Study of Rocks under the Microscope.* 4th edit. Cr. 8vo. Pp. 344. 7s. 6d. (Camb. Univ. Press.)

Index Kewensis, Plantarum Phanerogamarum: Supplementum Tertium. 4to. Pp. 198. 23s. net. (Frowde.)

Knaggs, H. V. *The "Microbe" as Friend and Foe.* 7 $\frac{1}{2}$ ×4 $\frac{3}{4}$. Pp. 94. Bds. 1s. net. (Jarrold.)

Maynard, F. P. *Manual of Ophthalmic Operations.* Illus. 8vo. 9s. net. (Thacker.)

Monckton, C. C. F. *Radio-Telegraphy.* 8 $\frac{1}{2}$ ×5 $\frac{1}{2}$. Pp. 290. 6s. net. (Constable.)

Murray, William. *Rough Notes on Remedies.* 6th edit. 7 $\frac{1}{2}$ ×4 $\frac{3}{4}$. Pp. 200. 4s. net. (H. K. Lewis.)

Ostwald, Wilhelm. *The Scientific Foundations of Analytical Chemistry.* Trans. by G. McGowan. 7 $\frac{1}{2}$ ×4 $\frac{3}{4}$. Pp. 272. 6s. net. (Macmillan.)

Quain's Elements of Anatomy. Edit. by Edward A. Schäfer and others. Vol. I. Embryology, by T. H. Bryce. Illus. 10×6 $\frac{1}{2}$. Pp. 284. 10s. 6d. net. (Longmans.)

Robertson, W. G. A. *Manual of Medical Jurisprudence, Toxicology, and Public Health.* 7 $\frac{1}{2}$ ×5. Pp. 572. 8s. net. (Simpkin.)

Russell, T. H. *Mosses and Liverworts: An Introduction, with Hints as to Collection and Preservation.* Illus. 8 $\frac{3}{4}$ ×5 $\frac{3}{4}$. Pp. 214. 4s. 6d. net. (Low.)

Wells, Robert. *Pleasant Drinks: Effervescing Mixtures, Syrups, Cordials, etc.* 16mo. Pp. 94. Boards. 1s. net. (A. Heywood.)



TO CORRESPONDENTS.—Please write clearly and concisely on one side of the paper only. All communications should be accompanied by the names and addresses of the writers. Publication of letters does not imply our agreement with the arguments or approval of the statements therein. If queries are submitted, each should be written on a separate piece of paper. We do not reply to queries by post, and can only answer on subjects presumably of interest to our readers generally. Letters received after the early posts on Wednesday cannot as a rule be dealt with in the current week's issue.

BUSINESS INFORMATION.—We have very full records of the makers or agents for articles and products connected with the chemical and drug trades, and supply information respecting them by post to inquirers. Inquiries regarding any articles which cannot be traced in this manner are inserted under "Information Wanted."

Australian Preferential Tariff.

SIR,—By the mail just in from Australia we have been asked by our agents specially to notify shippers to that country of the new Customs Regulation: All invoices must be accompanied by a declaration signed by the responsible head of the firm, and in the case of a company, bear the company's seal or stamp, and all signatures must be duly witnessed. In the absence of such declaration goods will be charged at the higher rate of duty.

Yours faithfully,

St. Mary Axe, E.C. NEALE & WILKINSON, LTD.

Is Sampling Good Business?

SIR,—Like Messrs. Herington & Son, I frequently receive from wholesale houses samples of new goods which they are introducing, but, unlike Messrs. Herington & Son, I have not found the custom distasteful. I am so placed that I do not always see new things until the novelty of them is wearing off; the samples are therefore helpful. I quite agree that in those cases where one has not an account with a firm it is presumptuous to plant goods on retailers unasked, but the remedy is obvious—return the goods at once "carriage forward."

Yours truly,

Scot. (218/26.)

Pensions for Women Pharmacists.

SIR,—May I, through the medium of the *C. & D.*, call the attention of all registered women to a pension-scheme? The Association of Women Pharmacists has been able to secure very favourable terms for its members from the Norwich Union Life Insurance Society, whereby, on payment of an annual sum, annuities of 10*l.* or multiples of 10*l.* may be obtained at the age of fifty, fifty-five, or sixty. In view of the fact that the majority of registered women are employed in institutions, and that their earning capacity diminishes after the age of forty-five, our Association has given a very prominent place to a combined scheme of insurance, and any qualified woman wishing to take advantage of the special reduction allowed to members (which in many cases will cover the annual subscription) should apply for a "proposal of membership" form to the Secretary of the Association of Women Pharmacists, Miss Bartrop, at Gordon Hall, Gordon Square, W.C.

Yours faithfully,

MARGARET E. BUCHANAN.

Legal Queries.

For concise statements respecting various Acts which affect directly or indirectly the Chemical and Drug Trades, see the "*C. & D. Diary*," 1908, p. 456; Stamped Medicine Law, p. 435; Pharmacy and Poisons Law, p. 448; and Patents Law, p. 442.

F. N. (216/73).—Retail chemists are not compelled by law to use dispensing scales enclosed in a glass case. You will find particulars of the most recent regulations for the inspection and verification of scales in the *C. & D.*, March 21, p. 466.

Land Tax (216/24).—A tenancy agreement specifies that "the tenant agrees to pay all rates, taxes, charges, and assessments whatsoever, whether Parliamentary, parochial, or otherwise, which now are or during the said tenancy shall be imposed or charged on the said premises or the landlord or the tenant in respect thereof." Does this include the land-tax? [Yes. In such agreements it is usual, when the landlord agrees to repay the tax, to include such a phrase as "excepting the land-tax," and without that the burden is the tenant's. It is unwise to accept an agreement worded as above, because it makes the tenant liable to charges other than rates and taxes—*e.g.*, paving and drainage.]

Ipecac. (218/9).—It is an open question whether the offer by a chemist and acceptance by a doctor of commission on prescriptions come under the Prevention of Corruption Act. You can see for yourself the terms of the Act in the *C. & D. Diary*, p. 460. Compare the conditions of the case which you have in view with these terms. The doctor must be the agent of the patient in order to be liable under the Act, and that is an exceedingly rare circumstance.

M. D. C. (217/19).—The titles which you quote do not in any instance render the medicines liable to duty, but the statement "Please insist on seeing Registered Trade-mark *M. D. C.* on every package" is a claim to proprietary rights, which makes them liable and excludes them from the known, admitted, and approved remedies exemption.

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months. A preliminary condition for reporting on samples submitted is that all particulars as to source and uses are given to us.

R. F. (203/23).—**DRY SHAMPOO LIQUID.**—The following is as near as we can get to the composition of your sample:

Soap-liniment	...	...	2 oz.
Liquid extract of quillaia	...	...	4 oz.
Bay rum	...	...	8 oz.
Proof spirit to make	...	...	20 oz.

Mix.

Strebor (211/68).—**LAMBING OILS.**—The kind you refer to is a mixture of—

Terebene	...	...	2 parts
Olive oil	...	...	4 parts
Soap-solution	...	...	4 parts

Mix.

See also *C. & D.*, May 30, p. 846, where suitable directions for use are given.

Immune (206/53).—**MIDGE-BITE PREVENTIVE.**—The following recipe produces a similar product to the sample you send:

Ol. cajuputi	...	...	3ij.
Tinct. pyrethri	...	...	3iv.
Mist. ammoniaci ad	...	...	3v.

Misce.

Directions: Apply to the neck, hands, and other parts of the body favoured by midges.

N. B. (197/70).—**BIRD-TONIC.**—It is not easy to match this, as it is not a scientifically made preparation. Our examination of the tonic enables us to suggest the following as embodying the main ingredients:

Terebene	...	...	1 dr.
Brandy	...	...	1 oz.
Syrup of Virginian prune	...	...	1 oz.
Easton's syrup	...	...	1 oz.
Cochineal solution	...	...	a sufficiency
Syrup to make	...	...	8 oz.

Mix.

The syrup is used as a bird-tonic in cases of pulmonary diseases—especially for canaries. A dose of 10 to 12 drops of the tonic is put into the drinking-vessel of water. The bottle requires shaking.

Inquisitive (206/64).—**DRYING-OFF COWS.**—The following represents the liquid you send:

Liq. plumbi	...	...	3j.
Aq. coloniensis	...	...	3j.
Spiritus ad	...	...	3iv.

Two tablespoonfuls of this liquid to be added to $\frac{1}{2}$ pint of water and well rubbed into the udder. Repeat after a few days if necessary.

Gapes (209/63).—TREATMENT OF GAPES IN CHICKENS.—In addition to carbolic fumigation and the local treatment, the remedies in common use are iron tonics (saccharated carbonate with asafetida and gentian), garlic, sulphur, and camphor. These drugs are administered in pill form or (in the case of sulphur) mixed with the food.

H. J. W. (207/66).—The syrup made from liquor prc syrupo senneae is not equal to the B.P. preparation on account of the difficulties in making the concentrated liquor. For the reasons you point out it is not possible to devise an economical and easily worked process.

E. A. T. (206/73).—ICE-CREAM POWDER.—See *C. & D.*, May 2, 1908, p. 694.

C. M. F. (208/5).—OPTICAL DIPLOMAS.—The syllabus of the examinations of the Spectacle-makers' Company may be obtained from Colonel T. Davies Sewell, 11 Temple House, Temple Avenue, London, E.C. Mr. J. H. Sutcliffe, 199 Piccadilly, London, W., will supply particulars of the examinations held by the British Optical Association. London, Manchester, and Glasgow are three centres where instruction can be readily obtained.

Tragacanth (201/70).—The herbal tablets are not amenable to analysis, owing to their complex nature.

M. J. (194/58).—HAIR-DYE.—No. 1 is prepared by adding solution of ammonia to copper-sulphate solution until the precipitate at first formed is redissolved. No. 2 contains pyrogallol or a similar phenol. The order of applying these liquids is generally the reverse of what you say.

R. V. R. (199/3).—LOION FOR WOUNDS ON HORSES AND CATTLE.—This appears to be tar-water to which a proportion of tincture of iron has been added—say, 1 oz. of the latter to 1 pint of tar-water.

G. H. W. (Trinidad) (137/45).—HORSE-LOION.—We find this to be practically rectified spirit to which some tinct. lavand. co. has been added. "G. H. W." informs us that the liquid diluted with water is used as a refrigerant loion for horses after a race—the use of the loion freshens up the animal.

Rigby (212/6).—STOCKTAKING.—See *C. & D. Diary*, 1907, p. 497.

A. G. L. (21/5).—Most of the modern foods for invalids consist of dried milk. The sample you send appears to have this composition.

X. Y. Z. (208/47).—MUSTARD-EMBROCATION.—The specimen of compound oil of mustard which you send approximates the following:

Camphorated oil	...	...	2 oz.
Expressed oil of mustard	...	...	4 oz.
Essential oil of mustard	...	...	½ dr.

Mix.

Glasgow (201/27).—BURN OINTMENT.—The chief ingredient in the ointment you send is emplastrum picis. By melting together 1 part of soft paraffin and 2 parts of pitch plaster you will arrive at an ointment of proper consistency and similar in composition to your sample. Some colouring may be needed. We do not consider it advisable to apply to a burn such a stiff ointment as the sample.

Tempus (211/9).—CUSTARD-POWDER.—The following is one of the three recipes given in "Pharmaceutical Formulas":

Cornflour	...	...	lb. j.
Arrowroot	...	...	lb. j.
Azo orange sufficient to colour.	...	...	...
Oil of bitter almonds	...	...	℥ss.
Oil of nutmeg	...	...	℥iij.

Mix.

The powder is put up in ½-oz. packets, this quantity being sufficient for 1 pint of milk. The directions for use should read thus:

Put the contents of the packet into a basin, pour on it a tablespoonful of water, and stir with the spoon to make it into a thin paste. In the meantime boil a pint of milk, into which you have placed two tablespoonfuls (not heaped) of the best granulated sugar (2 oz.), and while the milk is boiling pour it into the basin steadily, stirring well.

A richer preparation can be made by using cream (in whole or part), or two tablespoonfuls of the best condensed milk, in place of as much fresh milk. Instead of fresh milk a small teacupful of condensed milk and four teacupfuls of boiling water may be used.

Robin (210/55).—ATTRACTING FISH.—Oil of rhodium is used for attracting fish: it is mixed with the bait. *Coccus indicus* is a fish-poison, but the fish intoxicated with it are not wholesome.

J. R. (210/66).—BUST-DEVELOPMENT PASTES.—These are simply tragacanth pastes. The proportion is as follows:

Powdered tragacanth	...	...	3iss.
Eau de Cologne	...	...	3iv.
Rose-water	...	...	3vj.

Mix.

F.W. (31/40).—Plants collected at Minehead, West Somerset. *Claytonia perfoliata* and a pink speedwell.—The former is a succulent plant belonging to the natural order *Portulacacæ*, which is a group of succulent herbs or small shrubby plants natives chiefly of dry arid places in South America and South Africa. The common purslane (*Portulaca oleracea*) is perhaps the best-known species, having been cultivated from early times both as a pot-herb and for pickling. It possesses antiscorbutic properties. *Claytonia perfoliata* is a North-American species, but has become naturalised in many parts of this country. In America the leaves are used in the same way as the purslane. The speedwell is *Veronica cuneifolia*, not a British but an Oriental species, and belonging to the order *Scrophularinacæ*. It would be interesting to know under what conditions this plant was found.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form No. 7, cost £1, obtainable through any money-order office.

(From the "Trade-marks Journal," May 20, 1908.)

"VESTA"; for a photographic camera. By A. L. Adams, 24 Charing Cross Road, London, W.C. 300,958.

"SAN-KREYL"; for chemicals in Class 3. By J. Richardson & Co. (Leicester), Ltd., 10 Friar Lane, Leicester. 302,366.

"NEUVITA" and "BEAUTIANA"; (1) for india-rubber goods, etc., in Class 11; (2) for perfumery and toilet-preparations. By J. Highwater, 24 Southwark Street, London, S.E. 299,411, 299,607.

"SANAGENE"; for antiseptic and absorbent articles for use in accouchement, etc. By E. Thorp, 68 Brighton Road, Surbiton. 300,609.

"PHIALOID"; for hypodermic-injection medicines and empty glass-phials. By Istituto Terapeutico Italiano, Lab. di Biologia Appl. e di Terania Ipoderm. Riuniti, 4 Via Dante, Milan. 301,421, 301,422.

Devices for labels for aromatic mustard. By J. Farrow, Carlton Works, South Square, Boston; also Holbeach and Old Fletton. 301,010.

"ECLIPSE"; for toilet-paper. By A. E. Gosnell, 146 Croydon Road, Anerley. 300,381.

"LACTITIA"; for an infants' food. By Maatschappij Nutricia, Molenweg, W. zk, C. 949, Zegwaard, Zuid-Holland. 300,607.

"SICO"; for food-substances. By S. Coston, 16 Hartington Terrace, Westoe, South Shields. 300,731.

"FRUTTERBINE"; for a beverage. By Louisa Levin, 121 King Street, Ramsgate. 300,957.

"DRYCLEANA CLOTH BALL"; for a grease-remover. By Day & Martin, Ltd., 49-60 Borough Road, London, S.E. 300,966.

"CELLAFURO"; for a detergent cleanser, etc. By Baxendale & Co., 41 Miller Street, Manchester. 301,852.

"ROZOTTO"; for tooth-powder. By W. H. Hewett, 33 High Street, Cowes, I. of W. 297,691.

"ME-NO" and "VE-VO"; for goods in Class 48. By J. Irwin, Sons & Co., Ltd., 126 Orwell Road, Liverpool. 299,620, 299,621.

"ODENE"; for perfumery, &c. By the Odene Speciality Co., 15 Spence Lane, New Wortley, Leeds. 300,545.

"CLAN"; for goods in Classes 47 and 48. By C. Thomas & Bros., Ltd., Broad Plain Soap-works, Bristol. 300,599, 300,600.

"ORACLE"; for goods in Class 48. By Crossley's Dry Soap Co., 33 Redcross Street, Liverpool. 301,689.

"RIVERA"; for perfumery, &c. By E. Cook & Co., Ltd., East London Soap-works, Bow, E. 301,724.

"DENTHOLIO"; for goods in Class 42. By E. Mays, the Hollies, Albert Road, Stechford, Worcs. 301,771.

"PHOENIX"; for goods in Class 48. By T. Christy & Co., Old Swan Lane, London, E.C. 301,860.

"MET-BUTSU"; for perfumery, etc. By R. B. Breidenbach, 43 Greek Street, Soho, W. 302,193.

THE CHEMIST & DRUGGIST SUPPLEMENT.

OFFICE: 42 CANNON STREET, E.C.

SATURDAY, JUNE 13, 1908.

PUBLISHER'S NOTICE TO ADVERTISERS.

Advertisers are desired to take note that the advertisements of Businesses for Disposal and Wanted, Situations Open and Required, Exchange Column, &c., belong to the **PREPAID CLASS**, and to ensure the due insertion of the announcements the remittances must accompany the instructions. A great amount of unnecessary correspondence is occasioned by the non-observance of this regulation, and the Publisher hopes that the advertisers will assist in the quick preparation and despatch of the Supplement by strictly observing this rule.

A Copy of this Supplement is inserted in every Number issued of "The Chemist and Druggist."

THE SECRET

OF THE POPULARITY OF THE C.&D. SUPPLEMENT IS THIS:

ADVERTS IN IT
BRING RESULTS.

IT PAYS TO PAY TO ADVERTISE IN IT.

CHEMISTS' TRANSFERS.

Messrs. ORRIDGE & CO., 56 Ludgate Hill, E.C.

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

1.—BALHAM (near).—For immediate Disposal, good middle-class Retail Business; established 25 years; returns present rate £600, at fair prices; comfortable residence; private entrance; rent £55; price, simply the value of stock and fixtures.

2.—LONDON, S.E. (Residential Suburb).—Established Business, Retail and Dispensing; returns last year £739; scope for extension; roomy shop, double fronted; price £600, for which good value is offered.

3.—LONDON BRIDGE (within easy distance of).—General Retail and Photographic trade; established 30 years; main thoroughfare; returns £1,150; gross profit £400 (about); handsomely fitted shop, single fronted; comfortable residence, held on lease; price £400.

4.—HIGH BARNET (near).—Retail and Dispensing Business; well situate in the centre of town; returns £650; good opening for an energetic man; double-fronted shop; modern fittings; rent £60; price £400.

5.—WESTMINSTER.—Old-established Business; all good middle-class Retail and Dispensing; returns average over £750, last year being £774; net profit £260 (proof given); price about £600.

6.—MIDDLESEX.—Light Retail and Prescribing Business; returns present rate over £600; net profit one-third; small residence; rent £40 yearly; price about £400.

7.—HOME COUNTY.—Middle-class Business, chiefly ready money; returns between £450 and £500 yearly; net profit £143; roomy shop, single fronted; good position; rent £65; price £330.

8.—S.W. ENGLAND (Market Town).—General Retail and Prescribing Business; no heavy trade; returns about £425, but can be largely extended by energetic management; small residence; rent £25 yearly; price £190.

9.—ISLE OF WIGHT.—Old-established Business, situate in one of the leading thoroughfares; returns over £400; excellent opening for extended trade; gross profit 60 per cent.; rent £50, sublet £30; lease 10 years unexpired; price £250; part payment entertained.

10.—KENT (Market Town).—Situate in the centre of shopping district, within easy reach of London; returns between £550 and £600; gross profit £250; the business is capable of development; nice house; rent moderate; price £450.

11.—BANKS OF THE THAMES.—Modern Pharmacy, well established; returns £1,000 per annum, full profits; attractive shop and good stock, all open to full examination; vendor desires an early transfer, and is willing to accept very moderate terms.

12.—KENT COAST.—Rising health resort; returns £700; modern trading; very good profits, about 33 per cent. net; capable of large extension; small residence; rent £32; price £475; summer season shortly commences.

13.—ESSEX (Health Resort).—Mixed Business; no heavy trade; returns exceed £2,300; attractive shop, nicely fitted and fully stocked; comfortable residence; rent £60; the position is unique and the books will bear the fullest scrutiny; terms, valuation and sum for goodwill to be arranged equitably.

14.—DURHAM.—Neglected Business; returns last year £600, formerly over £1,500; single-fronted shop, main thoroughfare; terms £30 and valuation of stock and fixtures.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

VALUATIONS FOR STOCKTAKING.

Messrs. O. & Co. desire to emphasize the necessity of a Periodical Statement of Account, by which means alone Profit, the value of Business, &c., can be determined. Involving as this does the labour of Stocktaking and Valuation, it is often omitted, and eventually becomes the cause of confusion and loss.

Messrs. O. & Co. are prepared to undertake these essential duties and will make Special Terms for such services.

ORRIDGE & CO., 56 LUDGATE HILL, LONDON, E.C.

BRETT & CO.

CHEMISTS' VALUERS AND TRANSFER AGENTS,

Telegrams: "Brett Leicester."

8 WEST STREET, LEICESTER.

Telephone: 160 Y

VALUATIONS have always had our special and personal attention, and an experience of thirty years is at your disposal. **AGENCY.**—We have always a large number of *Buyers* on our books, and we can frequently find a Purchaser at once. We also have a *Private Register* for vendors who are in no hurry to sell and who do not wish their businesses to be advertised.

STOCKTAKING SPECIALISTS TO THE ENTIRE DRUG TRADE.

DURHAM.—General Family Retail, with Chemical Apparatus and Agricultural; in best position of large town; fine large shop; returns nearly £3,000; stock and fixtures at valuation, about £1,600, and a small goodwill.

LEICESTERSHIRE.—To an immediate purchaser the vendor will accept £500 down and the rest by instalments for a good Mixed Retail Business, also Oils and Colours, in main street of a large town; returns £2,400; stock and fixtures at valuation, about £1,200.

LINCS.—Light General Retail, with good Photographic connection and good Prescribing, in splendid position of large town; returns £1,400; price £800.

STAFFS.—Nice little Mixed Family Retail Business; now carried on as Branch and doing £800 under manager; price valuation, about £200; chance of a lifetime.

GLOS.—Good country Retail; unopposed; good shop; fine house and garden; very old-established; returns £600 (nearly); profitable; price about £530; only wants seeing.

MIDDLESEX.—Good Light Retail and Dispensing Business in healthy London suburb; nice house and garden; returns £320; price £200 or near offer; to a young man wishing to start for himself this is a bargain; stock and fixtures are worth £300.

LANCS.—Light Retail, Prescribing, and splendid own Proprietaries; Cash trade; no keen cutting; shop is large and splendidly fitted, and the finest position in the town; returns last year £1,360; price, stock and fixtures at valuation, about £850.

SHROPSHIRE.—Good General, Family Country Retail, with splendid Proprietaries; good house and well-fitted shop; profitable stock and fixtures at valuation and goodwill about £1,000; returns £1,140.

LONDON, S.W.—Light Retail, Dispensing, and Photographic; large house and shop; moderate rental; returns £1,300 under manager, and can be much increased; price £1,000; net profit £400.

HANTS.—Good little unopposed Country Retail; great scope for increase; yard and garden; returns £300; price £125.

YORKS.—Light Retail, Optics, and Photographic; large shop and convenient house; old-established; returns £1,500; net profit £400; valuation, about £1,200; worth prompt attention.

SOUTH-WEST.—Light Retail and Dispensing, Prescribing, and own preparations; fine corner shop, well fitted; large house; returns over £700; stock and fixtures about £550.

KENT.—Mixed Retail, Prescribing, and Photo, on the coast; returns £700; good season trade; old-established; long lease; worth prompt attention; price £475.

LANCS.—Good middle-class Retail with Photographic and Wines; returns nearly £2,000; net profit £400; old-established; very low rent; stock and fixtures at valuation, about £1,200.

LANCS.—Light Retail, Photographic, and Optics; no Patents stocked; returns £800; net profit £250; rent £40; stock and fixtures at valuation (£600); can be reduced.

ESSEX.—High-class Retail, Dispensing, and Photographic; returns £1,000; nice spacious shop and large house; the best position in the town; valuable lease; price only £550.

MESSRS. BERDOE & FISH,

Chemists' Valuers and Transfer Agents,

35 JEWRY STREET, FENCHURCH STREET, CITY.

TELEPHONE: 1809 CENTRAL

Have the following Businesses for Disposal. (No charge to Purchasers.)

1.—**COUNTY DURHAM.**—Sound Retail, Prescribing, and Dispensing Business, in the best position of good market town; returns over £2,800; large shop, well fitted and heavily stocked; sole cause of sale, retiring; price £1,600, or valuation.

2.—**CORNWALL.**—Good-class Retail, Dispensing, and Prescribing Business, in fashionable seaside resort; returns £1,400; scope for increase; commanding shop, well fitted and stocked; low rent; price £950.

3.—**LEICESTER.**—Good Light Retail, Dispensing, and Prescribing Business; returns £17 weekly under manager; very good position; low rent; well-fitted shop, good stock; price £450, £200 can remain if desired.

4.—**SUSSEX.**—Light Retail, Dispensing, and Prescribing Business, in centre of good town; returns over £1,000; net profit £300; large house; well-fitted shop and fully stocked; same hands many years; now retiring; price £900.

5.—**KENT** (Inland Health Resort).—Good-class Retail and Dispensing Business; returns £600, increasing; net profit about £200; handsome pharmacy, well stocked; good house, etc.; price £450, or near offer.

6.—**SOUTH DEVON.**—Light Retail and Dispensing Business, with own Specialities; returns over £900; excellent profits; good position; stock and fixtures worth £600; owner retiring; price £650, or close offer.

7.—**EASTERN COUNTY.**—Light Family Retail and Dispensing Business, in good position of important town; returns over £700; net profit £200; well-fitted Pharmacy and well stocked; price £550.

8.—**LONDON, W.**—High-class Dispensing and Light Retail Business; returns £1,280; excellent position; handsomely fitted shop and well stocked; price £950; strongly recommended.

9.—**LONDON, S.W.**—Light Retail, Prescribing, and Dispensing Business; in same hands many years; returns over £500; good profits; low rent; good house and garden; price £260, simply valuation.

10.—**MIDDLESEX** (Few Miles out).—Good-class Retail and Dispensing Business, in first-rate position of fast-growing suburb; returns about £1,300; modern Pharmacy, well fitted and stocked; price £700, or £100 and valuation.

11.—**YORKSHIRE** (Seaport Town).—Genuine Light Retail and Prescribing Business, with own specialities; returns £675; net profit £250 clear; well-fitted shop and fully stocked; low rent; price simply valuation, about £350.

12.—**SOUTH-WEST COAST.**—Good Light Retail, Dispensing, and Prescribing Business, in best position of small seaside town; returns £620; net profit about £200; nice house; modern shop, fully stocked; price £25 and valuation of stock and fixtures.

13.—**KENT** (Fashionable Seaside Resort).—Good-class Retail, Dispensing and Prescribing Business; returns £750; very good position; handsome Pharmacy, well fitted and stocked; good house; price £450; worth special attention.

14.—**BEDFORDSHIRE.**—Light Retail, Prescribing, and Dispensing Business; returns £570; net profit over £200; can easily be made do £750; well-fitted shop; good position; price £475, or £50 and valuation.

15.—**SOMERSET.**—Light Retail, Prescribing, and Photographic Business, in small market town; returns £526; net profit £160 to £180; nice house; low rent; price £250; part can remain.

16.—**MANCHESTER** (Near).—Light Cash Retail, Prescribing, and Dispensing Business, in small town; returns £630; net profit about £180; convenient house and shop; low rent; price £365; simply valuation.

17.—**CITY.**—£1,500 will secure an old-established Wholesale Druggists' Sundries Business; returns £5,000; plenty of scope; stock alone worth £2,500; Partnership entertained.

18.—**LONDON, N.**—Good middle-class Retail Business, a few miles out; returns over £750; net profit £250; attractive modern Pharmacy, well fitted and stocked; price £450, simply valuation.

STOCKTAKING.

If you are thinking of having your stock taken this year by an independent expert who does the work himself, first read our full-page advertisement in this year's "Diary" (p. 76) and then write for our revised and reduced terms for doing the work.

J. G. BERDOE established the firm in 1870, and **W. S. FISH** was apprenticed to him in 1877.

PARSON C. BAKER

174 VICTORIA ST., LONDON, S.W.

Telephone:
No. 27 Victoria.

Recommended by—MESSRS. BARRON, HARVEYS & CO.
MESSRS. MEGGESON & CO.
MESSRS. BARCLAY & SON, LTD.

LONDON, WEST (good residential district).—Old-established Dispensing Business, returning over £1,250; lock-up shop, well fitted and fully stocked; first-class position; rent £80, free of rates and taxes; 18 years' lease; price £900; vendor taking much larger business; fullest investigation.

LONDON, NORTH.—Well-established and continuously increasing Family Retail and Dispensing, in pleasant, healthy, and rapidly increasing suburb; best position; good, new house, every convenience, and handsomely fitted shop; returns nearly £1,400; price £100 and valuation.

KENT (centre of good Inland Town).—Old-established Business, with first-class house, shop, premises, and garden; business much neglected through illness; returns now only £700; will be sold for value of stock and fixtures to realise estate of deceased owner.

BEST Dispensing Business in Kentish seaside town; returns over £1,000; well-fitted shop and good house; price £700 or near offer; full investigation.

North of England Transfer Agency.

FRED^K. W^M. SMITH,

CHEMISTS' VALUER,

3 BELGRAVE TERRACE, LEEDS,

has always a number of good Businesses for Sale, also Clients open to Purchase good, sound concerns. Strict secrecy. Correspondence solicited. Valuations for Transfer, Probate, and Stocktaking on reasonable terms.

JACKSON & COMPANY.

Chemists' Valuers, Auctioneers & Expert Stocktakers

All kinds of valuations undertaken at a guaranteed cheaper rate than any other firm now advertising.

Seventeen years of sound practical experience.

OUR SPECIALITY.—Chemists' Stocktaking, either for valuation or annual. We make special terms to firms requiring their stocks taken yearly.

All enquiries receive our prompt and entire attention, and all business treated strictly confidential.

Distance no object.

If you have a Business for sale or require one, place the matter in our hands.

We have generally healthy businesses for disposal.

Chemists' Stocks, Fixtures, and all Shop-fittings purchased entire or piecemeal.

No businesses dealt with but those connected with the drug trade.

16 Stratford Avenue, ROCHDALE.

The only firm of Chemists' auctioneers in the trade.

T O M T O M

Telegraphic Address.

THOS. TOMLINSON & SON.

Chemists' Valuers and Expert Stocktakers,

Businesses transferred privately.

29 NEW CANNON STREET, MANCHESTER.

BUSINESSES FOR DISPOSAL.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.

NOTE.—Replies can be addressed to this Office and forwarded to the Advertiser for an Additional charge of 6d.

COLONIAL BUSINESSES.

We call the special attention of our Colonial subscribers to the opportunity this Supplement affords when they wish to dispose of their Businesses, of getting into touch with likely buyers either at home or in the Colonies.

IMMEDIATE RESULTS.

A retailer (219-25) who advertised his business in this column wrote us on June 10 as follows:—

Gentlemen,—Please send the C. & D. to our new address; we shall be disappointed if we do not get it as usual on Friday. We advertised our business for sale, and Mr. — called on Tuesday, paid cash, and took over at once. We had several applications for it, and had no trouble in the matter; in fact, we could have sold it two or three times over.

BATH.—Small Business for Sale, suitable for single man. Full particulars on application (accompanied by reference) to "Radium" (52/24), Office of this Paper.

BIRMINGHAM Suburb.—Drug-store on main road; returns £500; unique opportunities for increase by Chemist; price £250, value of stock and fixtures. Apply, 48/26, Office of this Paper.

DARLINGTON (near).—Branch for Sale; old-established Mixed Country Business; prospect good; Agricultural and Domestic; price about £600; returns approach £1,000; owner would accept shares in a responsible company, or give assistance to a thoroughly capable man on mutual terms. Apply to "Owner" (49/26), Office of this Paper.

DORSET COAST.—A good-class Family Retail and Dispensing Business; best position in the town; good house; same hands 14 years; returns between £1,700 and £1,800, at excellent prices; over 8,000 Prescriptions dispensed yearly; stock and fixtures worth £1,200; price £1,500; valuation terms arranged if desired; further particulars to bona fide cash buyers. Address, "S. W. R." (54/2), Office of this Paper.

HACKNEY, 86 Well Street.—For Sale, an old-established Chemist Business in a thickly populated district; been neglected, but capable of being worked up by an energetic man; price £120, or could be purchased on the easy-payment system. For particulars apply to Miss Hodge, 46 Windmill Street, Gravesend.

HAMPSHIRE.—Good-class genuine Business; through ill-health, returning the last three years about £1,000 a year at good profits; large and first-class stock; 10 years' lease unexpired at low rental; comfortable residence in delightful neighbourhood; cash offers wanted. Hants, c/o Hearn & Co., 38 Southwark Street, London.

LANCASHIRE.—Grand stand, most central position; corner lock-up shop; seaside, season just commencing; Wine licence; every investigation allowed; cheap. 51/14, Office of this Paper.

LEICESTER.—Main road; healthy suburb; Light Retail Dispensing, with good Mineral-water trade and own syphons (value alone £16); well fitted mahogany complete, York bottles; attractive window, plate-glass fittings; low rental, net £28; good house, bath, exceptional value, £125 cash; retiring owing to family (principals only). "Coxdono" (52/18), Office of this Paper.

LONDON (charming residential suburb).—Retail, Prescribing, Dispensing, Photographic Cash Business; smart Pharmacy; excellent stock; low rent; good house; electric light; bona-fide purchasers should see this; exceptional opportunity of purchasing a profitable Business; £17 per month net; over £50 gross; terms, valuation, about £375, or reasonable offer considered; no agents. "Thames" (49/27), Office of this Paper.

LONDON (West-end).—Returns over £2,400, and increasing; good-class Retail and Dispensing, with own Proprietaries; nearly 4,000 new Prescriptions yearly; lock-up shop, in splendid position; stock and fixtures worth £1,100; price £1,200; only cash buyers entertained. Apply, with references, to "Progressive" (54/02), Office of this Paper.

MIDLANDS.—For Disposal, Drug-store in thickly populated district; very profitable; all cash trade, which has considerably increased the last three years; owner, going abroad, will accept £75 and balance in instalments; splendid opportunity to get sound business at a very low price. 49/23, Office of this Paper.

SOUTHERN Health Resort.—Good-class Dispensing and Retail Business; genuine, well-established; situated in good neighbourhood; returns increasing; large shop, well fitted and stocked; good house in thorough repair; lease; low rent; owner retiring; price £500. 50/33, Office of this Paper.

BUSINESSES FOR DISPOSAL

(continued.)

A CHANCE FOR AN ENERGETIC MAN is provided by the acquirement of the Infirmary Pharmacy, 138 Westgate, Bradford, which was founded by Forshaw & Snow in May 1894, and is now for Sale; Mr. Suow retired from the partnership six years ago; at that time the stock and fixtures were valued at £500, and they have in no way deteriorated since. The business is offered for £250 (or nearest offer), half down and the balance by arrangement if desired. A few years ago £80 was taken week after week in prescribing alone, and a qualified man can easily make the business one of the most lucrative in the city. Further particulars from Forshaw & Ellison, Dental Surgeons, 140 Westgate, Bradford.

CHEMIST'S Business, large town near Manchester, for immediate Sale; Mixed Drugs, Photo goods; densely populated locality; returns over £400; good house and warehouse; rent £28; valuation or £250; excellent scope for young man, and one who could introduce Optics and Dentistry. Apply "Phoenix," Messrs. Evans & Co., Hanover Street, Liverpool.

FOR SALE.—Southern Health Resort; established 30 years; no cutting; no patents; good Photographic; returns average £500, has done considerably more; much neglected; main thoroughfare, close to pier and station; rent £50, sublet £30; good clientele; gross profits 70 per cent.; price £250; terms could be arranged. "Chemists," 82 King Street, Southsea.

ILL-HEALTH compels immediate Disposal of old-established Business; Country Family trade; large market town, Kent; good position, though near opponent; good shop and premises, well fitted and stocked; present returns (neglected) over £600; rent £40; price, valuation, or offer (about £325). "Senken" (221/3), Office of this Paper.

NICE Business, doing £900 turnover, in West Suburb; rapidly increasing under management; Dispensing, Family, and Photographic; good sale of own Proprietaries; good reason for disposal; opportunity for beginner; can be worked single-handed; large modern house; price, value of stock and fixtures, about £575. "Western" (52/37), Office of this Paper.

TWO Chemists.—For immediate Sale, a Family Drug Business in North-West Lancashire; takings about £500 per annum, steadily improving; rent £23; good house connected with business premises; price required, £225. Apply, "Quinine," c/o Evans Sons Lescher & Webb, Ltd., Liverpool.

£15, Quick Sale.—Drug-stores; part could be let off, Doctor or Dentist, separate entrance; main thoroughfare, S.E. district of London; good growing concern; low rent, inclusive; no reasonable offer refused; satisfactory reasons given for disposal. Apply, 54/23, Office of this Paper.

£110 cash buys small Country Business (Mixed) in Scotland; capable of increase; good prospects; outlay recovered in first year's profits; genuine bargain; good reasons for disposal; or would also sell as stock and fittings, latter up to date and good as new. For particulars apply "Century" (49/39), Office of this Paper.

BUSINESSES WANTED.

A DVERTISER would like to manage, with view to early succession; part cash, remainder weekly instalments; village or healthy town; unqualified; disengaged shortly. Particulars (which will be regarded as confidential), "Rhei" (52/38), Office of this Paper.

GENUINE Retail and Dispensing Business wanted in or out of town, showing net profit of £250 or thereabouts; no agents. Replies treated in strict confidence. 53/38, Office of this Paper.

MESSRS. BERDOE & FISH have a large number of bona fide cash purchasers on their books requiring sound concerns in all parts of the country at prices ranging from £300 to £3,000; private register kept, and strictest confidence guaranteed; correspondence cordially invited from intending vendors. Address, 35 Jewry Street, Feuchurch Street, E.C.

WANTED, small genuine Business in village or small town; Devon or Cornwall Coast and unopposed preferred, but not essential if healthy district and South; cash £250 to £500; strictest confidence observed; no agents. Full particulars to "A. P. S." (49/17), Office of this Paper.

WANTED, a genuine good-class Business; open to invest up to £1,000. Full particulars (in confidence), "L. P." (221/2), Office of this Paper.

PARTNERSHIPS.

AN opportunity occurs for Investment in an old-established and high-class Chemist's business; sleeping Partner preferred, but good working Partner with possible view to succession would be considered. 50/39, Office of this Paper.

IN an old-established, good-class business in the North of England an opportunity occurs for an active man accustomed to such business with a fair amount of capital at disposal. "X." (49/24), Office of this Paper.

TO LET.

MAIN-ROAD Shop, North London; newly built one to Let out of parade of 10; low rent, with good fittings included; immense cash neighbourhood forming close round; some trades not available, but would suit Store Chemist with Dispensing, none near. Apply, Dunk & Bousfield, Surveyors, Billiter Square Buildings, London, E.C., or Hurley's Estate Office, Westbury Avenue, Wood Green, N.

STREATHAM.—Main road; commanding shop premises to be Let or Sold; every accommodation; suitable for a Chemist or a Drug-store; moderate initial rental. Apply, Philip C. Davies, Estate Agent, 323 High Road, Streatham.

TWO CHEMISTS AND DRUGGISTS.—WEST EALING.—Fine Shop premises; centre business position; only £40 rent; grand opening for capable man, as owing to present tenant moving into larger premises goodwill of an established business will remain without payment. Apply, Geo. Ravenshear, 1 Broadway, West Ealing, W.

SALES BY AUCTION.

IN BANKRUPTCY.

Re F. E. WOODS, 230 CHEETHAM HILL ROAD, MANCHESTER. WEDNESDAY, JUNE 17, 1908, at 11 A.M. PROMPT.

MOUNTAIN, SONS & CO. have received instructions from J. Grant Gibson, Esq., Official Receiver, to SELL by AUCTION the whole of the Stock-in-Trade, Fixtures, and Effects of a Dispensing Chemist.

Auctioneers' Offices, 31 Queen Street, Manchester.

TENDERS.

TENDERS are invited on behalf of the Trustee in Bankruptcy for the purchase of a LIGHT RETAIL, DISPENSING, AND FAMILY CHEMIST'S AND DRUGGIST'S BUSINESS, established over 50 years, in centre of city, and near G.P.O., Lincoln.

Stock taken and valued with Fixtures, January last, total £1,196 19s. 9d. (now estimated at £120 less). Note.—Stock clean and salable. Fixtures good and modern. Shop and house of a commanding appearance. Private house door. Must complete transfer by end June.

Inquiries, leave to view, and investigation invited. Please call or write, J. Wingate, Chemists' Valuer, 294 High Street, Lincoln, to whom all Tenders must be posted on or before June 20, 1908.

FOR SALE.

FOR Sale, the complete Fittings and Fixtures of a first-class Chemist's and Winedealer's shop, 14 by 16; mahogany fixtures, mirrors behind bottles, Treble's dispensing counter and cases, wine-bins, shop-rounds, 4 hanging carboys, etc.; will accept reasonable offer; also Pindar's treadle pill-machine and piping-press, only used about 5 times; Werner & Pfleiderer's masser; Maw's coater; what offers? Hart & Son, Pharmaceutical Chemists, Newport Street, Bolton, Lancs.

APPRENTICESHIPS.

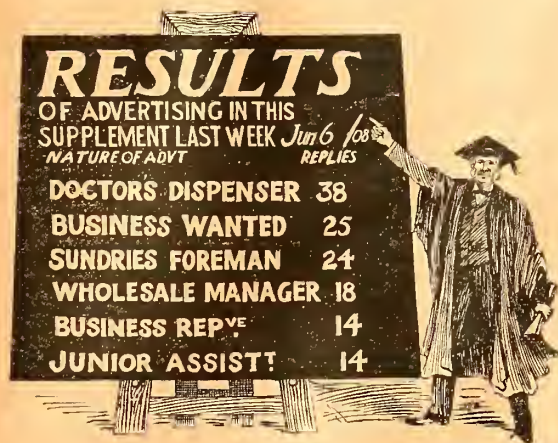
YOUTH (16), just leaving school, to be Apprenticed good-class Dispensing and General business. Full particulars to H. Dixon, 1 Bexwell Road, Downham Market, Norfolk.

AGENCIES.

GENTLEMAN wishes to obtain a Representation for a well-known and advertised Proprietary article or articles among Chemists, Stores, etc., in Midlands and North of England, on commission or part commission and expenses; good offices and clerical staff in Birmingham; can stock if required; employs several travellers. 48/23, Office of this Paper.

SITUATIONS OPEN.

3s. 6d. for 50 words or less; 6d. for every 10 words beyond, prepaid.



RESULTS
OF ADVERTISING IN THIS
SUPPLEMENT LAST WEEK *Jun 6 / 08*

NATURE OF ADVT	REPLIES
DOCTORS DISPENSER	38
BUSINESS WANTED	25
SUNDRIES FOREMAN	24
WHOLESALE MANAGER	18
BUSINESS REP ^{VE}	14
JUNIOR ASSIST ^T	14

This Blackboard demonstrates that Advertisers using these columns get a ready response to their announcements. The figures only refer to some of the letters RECEIVED AT OUR OFFICE on behalf of advertisers who use a number or nom de plume.

PHOTOGRAPHS AND TESTIMONIALS.—Assistants should not send their photographs to advertisers of Situations Open unless they are specially requested to do so, and then enclose a stamp for return. In no case should the originals of testimonials be sent; copies suffice until negotiations are approaching completion, when the originals may be submitted at the employer's risk.

RETAIL.

ABERDARE.—Wanted, Junior or Improver Assistant; abstainer; satisfactory references required; hours 8 to 8; half-holiday; no Sunday duty. Apply, with usual particulars and photo, if convenient, to C. A. Harries, Chemist, Aberdare.

ALDERSHOT.—Wanted, at once, qualified Assistant, married, for old-established business; live on premises; permanency for suitable man. Apply, stating age, references, and full particulars, to Williams, 27 Cargate Avenue, Aldershot.

BIRMINGHAM.—Manager, qualified, wanted in a pleasant suburb of Birmingham; good salary to a smart up-to-date man. Send photo, with the usual particulars, to "Chemicus," c/o Messrs. Southall Bros. & Barclay, Birmingham.

BRIGHTON.—Wanted, Junior Assistant for good-class Dispensing business (indoors). Full particulars, with photo (to be returned) to Jeeves & Son, Brighton.

BUCKINGHAM.—Wanted, Senior Assistant, accustomed to good-class country business; knowledge of Photography; hours 8 to 10.30, Saturdays to 9.30; weekly half-holiday from 2; live in, sleep out (bedroom found). State age, height, salary, references, with photo (to be returned), Brown, Chemist, Buckingham.

CHELTENHAM.—Junior or Improver wanted (indoors), for good-class Light Retail, Dispensing, and Photographic business. In reply, please state experience, age, height, reference, and salary required, with photo, to Arthur Hill, Chemist and Dentist, 98 High Street, Cheltenham.

CHESTERFIELD.—Locum (qualified), for one month, commencing July 4. Full particulars, Twelves, Whittington Moor, Chesterfield.

CITY OF COVENTRY.—A steady, reliable, qualified Assistant (outdoors) required for Branch business. In reply state age, experience, salary required, when disengaged, and other particulars. Frederick Bird, Chemist, Midland Pharmacy, Spon Street, Coventry.

CLIFTON.—Experienced qualified Assistant; about 30; accustomed to good-class Retail and Dispensing and able to take charge occasionally; must be well recommended. Full particulars and photo to Harold E. Matthews, 30 The Mall, Clifton, Bristol.

CROYDON.—Wanted, smart qualified Assistant (outdoors), good Counterman and Dispenser, with Photographic experience; no Sunday duty; half-day weekly. Apply, enclosing C.D.V., with full particulars, to W. H. Gill, 40 George Street, Croydon.

EASTBOURNE.—Improver wanted, by 23rd, for high-class Dispensing business. State salary (outdoors), with usual particulars, enclosing carte, to H. R. Browne, Pharmaceutical Chemist, Eastbourne.

FOLKESTONE.—A smart Junior, for good-class Cash business; knowledge of Photography essential; indoors; permanency. Price, M.P.S., Tontine Street.

HAMPTON COURT.—Wanted, at once, Assistant, about 22 (indoors), with knowledge of Dispensing and Photography. Apply, with full particulars and salary required, J. S. Wellburn, Bridge Road, East Molesey.

HITCHIN.—Qualified Assistant wanted for small Mixed country business; hours short, work light. Apply, stating age, height, and salary required, to Webb, Sun Street, Hitchin.

HOYLAKE (Cheshire).—Wanted, from July 27, an Assistant for a few weeks; good-class Dispensing and Photographic experience. References and remuneration to Jennings & Co., Hoylake, Cheshire.

ILFRACOMBE.—A gentlemanly Assistant; about 24 years; indoors; Dispensing and Light Retail. Usual particulars, age, height, salary, with reference, etc., enclosing photo (to be returned), Walter Crang, Capstone Pharmacy, Ilfracombe.

INDIA.—Wanted, at once, for Calcutta, young man with good experience and first-class references; must be strong, healthy, unmarried, and with Minor qualification; 4 years' agreement; salary rupees 200, 225, 250, and 300 monthly; passage paid out and home. Apply, stating experience, age, etc., to 36/24, Office of this Paper.

LANCASHIRE.—Assistant in Mixed Country business with Wholesale attached; capable of travelling 2 or 3 days per week; man with experience in similar sort of business and in travelling preferred; must be steady. State salary, reference, and full particulars, to 52/5, Office of this Paper.

LEIGH.—Immediately, qualified Manager; age about 30; married preferred; knowledge of Optics and Photography essential; house provided; half-holiday weekly. State full particulars as to previous engagements, age, height, salary required, to F. J. Parker, Huyton, Liverpool.

LIVERPOOL.—A qualified Assistant; accustomed to good-class business; 26 to 30 years of age; married man to live on business premises preferred. Symes & Co., 14 Hardman Street, Liverpool.

LIVERPOOL.—Qualified Assistant as Senior; Photography, experienced Dispenser; two others kept; married man, about 30, preferred. Full particulars, stating salary expected, E. Prebble, Chemist, 187 Kensington, Liverpool.

LONDON, S.W.—Counterman wanted, aged about 25, accustomed to good-class Retail; salary 35s. (outdoors). Apply, stating full particulars, by letter, to 1314, Sell's Advertising Offices, London, E.C.

LONDON, S.W.—Smart Junior Assistant wanted for Cash Retail and Photographic trade. State full particulars and salary required (outdoors), to A. W. Herbert, 77 Atlantic Road, Brixton, S.W.

LONDON, S.W.—Qualified Assistant wanted (indoors), with good experience in Dispensing and Light Retail; thoroughly reliable; aged 22-23. Apply, Davies, 485 King's Road, West Chelsea, S.W.

LONDON, West.—Senior Assistant; qualified; indoors; three share duties. Full particulars as to salary required and photo (if possible), or personally, to H. S. & Co., Ltd., 7 Pall Mall East, S.W.

LONDON, N.W.—End of June or earlier.—Smart, qualified Assistant (outdoor), chiefly for Dispensing, with knowledge of Counter and Photographic, and preferably Optical work also. Photo and full particulars to Brickell & Jones, Brondesbury, N.W.

LONDON, S.W.—Dispenser; Minor qualification; outdoors; aged about 25. Address, with full particulars of experience and salary required, to 1313, Sell's Advertising Offices, London, E.C.

LONDON, S.W.—Wanted, immediately, a good Junior Assistant, from 22 to 24 years old; outdoors. Apply, "W. E." (54/8), Office of this Paper.

SITUATIONS OPEN *(continued.)*

LONDON, W.—Qualified man, also Assistant, used to Store trade; good references indispensable. Apply, Dodd's Drug-stores, Ltd., 70 Tottenham Court Road, Saturday morning, 9.30 to 10.30.

LONDON, W.—Qualified Assistant wanted, end of June, for West-end Dispensing business; indoors; not over 30. Apply, with full particulars, Lynn, 94 Queen's Road, Baywater.

LONDON, N. (Central).—Manager; competent; energetic; about 30; married; live on premises; undeniable references; permanency to man of good character and business ability, with option of purchase. Apply, "Develop" (52/10), Office of this Paper.

LONDON, W.—Qualified Assistant (indoors) by June 19; weekly half-holiday; must be an accurate Dispenser and good Counter-man. Applicants will please state age, height, previous experience, salary required, enclosing photo (if convenient), "Euoswey" (51/15), Office of this Paper.

LONDON, W.—Qualified Assistant; knowledge of Photography. State full particulars as to age, height, salary required, etc., to "Validol" (50/31), Office of this Paper.

LONDON, N.W.—A competent Assistant required for a good-class Dispensing and Retail business; must be a good Dispenser and of gentlemanly appearance. Apply, with full particulars, to A. Allebin & Co., 28 England's Lane, N.W.

LONDON, N.—Qualified Assistant; outdoors; aged 27; must be a quick, accurate, and neat Dispenser. Apply personally, or if by letter send photo, to Walker's Drug-stores, 100 Myddleton Road, Bowes Park.

LONDON, S.W.—Qualified or good unqualified; indoors; capable of taking charge; good Dispenser and good experience; personal interview necessary. Apply first, with full particulars, to 221/1, Office of this Paper.

LONDON, S.W.—Messrs. T. Jones & Co., 5 Putney Hill, require a qualified Junior; age about 22; accustomed to good-class Dispensing and Retail; must have good references. Please send usual particulars; photo if convenient.

LONDON, N.W.—Qualified Junior wanted for Dispensing business, P. Davidson, Pharmaceutical Chemist, 342 High Road, Brondesbury, N.W.

LONDON, W.—June 23, gentlemanly Assistant; qualified; well up in Dispensing; town experience and good references; some knowledge Photography; personal interview. Howard, 4 Napier Road, Kensington, W. Telephone 69 Kensington.

LONDON, W.C. (outdoors).—Wanted, Junior Assistant, with London experience; good references essential. Apply personally to Haynes, 72 Southampton Row, W.C.

MARGATE.—Wanted, a Branch Manager (qualified), to reside on premises. State full particulars of experience, whether married or single, when disengaged, age, height, salary required, and enclose photo (to be returned), to D. T. Evans, The Parado, Margate.

NEAR LONDON.—An Assistant, immediately; outdoors; must be a competent Extractor, with good general knowledge; permanency for suitable man; state age and salary required; applications not replied to in due course may be considered declined. "Statim" (53/39), Office of this Paper.

NEWCASTLE-ON-TYNE.—Wanted, qualified Junior Assistant for Dispensing counter; indoors. Apply, stating age, experience, and references, with photo (to be returned), to Brady & Martin, Ltd., Northumberland Road, Newcastle-on-Tyne.

NORTH WALES COAST.—Wanted, about middle of July, a temporary Assistant; must be accustomed to Dispensing and Photography; outdoors. Apply, stating full particulars, salary, etc., to C. R. Dixon, Chemist, 14 Water Street, Rhyl.

NORTHAMPTON.—Outdoor Junior Assistant wanted at once; easy hours; no Sunday duty, weekly half-holiday; dinner and tea provided, except Sunday and Thursday. Give particulars of age, salary, references, and what experience in Dispensing and Photography, enclose photo, P. Jeyes & Co., Ltd., Northampton.

OXFORD.—Qualified Assistant (indoors), to assist at Dispensing counter and make Pharmaceutical preparations. Full particulars to Dolbear & Goodall (late Hitchcock & Co.), Chymists, 108 High Street, Oxford.

PARIS.—Qualified Assistant of good experience and address; knowledge of French preferred. Apply, giving full particulars of age, height, etc., to Roberts & Co., 76 New Bond Street, W.

PROVINCIAL TOWN.—Vacancy for Assistant, 21 to 30, accustomed to good-class trade, to assist at Dispensing counter, make B.P. and other preparations, and generally take charge of stock; must be strictly sober, obliging, and a good worker. Give particulars of experience and state salary required (outdoors), to "Sulphonal" (52/42), Office of this Paper.

RAMSGATE.—For season, from July 1, a capable Assistant (indoors). Please state age, experience, and salary required, and enclose photo (to be returned), J. H. Skitt, Chemist, Ramsgate.

RAMSGATE.—Junior; unqualified; outdoors; for season beginning R July 1; good knowledge of Photography. State usual particulars, Holmes, Chemist, Ramsgate.

SOUTH WALES.—Assistant wanted, early in July; good Tooth Extractor and Prescriber; active; good salesman; outdoors. Apply, stating age, experience of Dentistry, salary required, references, to 53/14, Office of this Paper.

THIRSK.—Wanted, a qualified Assistant for Mixed class trade in the North; accustomed to Prescribing, Extracting, and Photography. Apply, giving full particulars as to age, references, salary required, and when at liberty, in first letter, "Velox," Central Buildings, Thirsk.

TORQUAY.—Qualified Senior, competent to manage, for branch business; outdoors; applicants please state age, height, and full details of experience, photo, salary required; one seeking permanency preferred. F. March, F.R.Met.Soc., Torquay.

WESTGATE-ON-SEA.—Indoors; gentlemanly qualified Dispenser; salary £60; also smart Junior, well up in Photography. Carte and full particulars to F. R. Bessant, Ph.Ch.

WINCHESTER.—Wanted, at once, Junior or Improver; indoors. Apply, with full particulars, to Hunt & Co., Chemists, Winchester.

WOLVERHAMPTON.—Martyn's Stores, Ltd., require smart, energetic qualified Manager for lock-up Branch in good working-class district; suit single man; remuneration partly by results; state salary required and particulars of engagements had during last three years; applications without last information not considered.

WORCESTER.—Assistant wanted, July 1; knowledge of Photography essential. Full particulars as to terms, references, &c., to Milne, Chemist, Worcester.

WORCESTER.—Assistant wanted for good-class Business (indoors); half-day holiday weekly. Apply, giving age, height, experience, salary required, and enclose photo, to Mr. Coverdale, George & Welch, Chemists, Worcester.

WORCESTER.—Wanted, immediately, Assistant; Retail and Dispensing; short hours. State experience, salary required, outdoors, or indoors at proprietor's private house, and enclose photo (which shall be returned), H. J. Aubrey, The Cross, Worcester.

YORKSHIRE (West Riding).—Wanted, shortly, a competent qualified second Assistant who is seeking a permanency; he must have had good and varied experience in both Dispensing and Counter work in a high-class pharmacy. Enclose photo and state age, experience, and salary required, to "Alpha" (49/33), Office of this Paper.

A GOOD capable Assistant, qualification not essential, but preferred, in about two or three weeks' time; must be well up in all branches of a good-class county business. State fullest particulars in first letter as to age, height, reference, photo, salary (indoors), "Rex," Davy Hill & Co., Park Lane, Southwark, London.

A QUALIFIED Assistant (outdoors) required for two or three months by West-end firm; must have had good experience and not afraid of work; knowledge of French preferred; hours 9 to 8.30. Apply, first by letter, 48/30, Office of this Paper.

A SSISTANT, qualified preferred, in a good-class Dispensing and General Retail business. State age, salary (indoors), height, reference, and experience, enclosing carte (if one), H. S. Martin, Ltd., Chemists, East Grinstead, Sussex.

BRADLEY & BOURDAS, 6 Pont Street, will require, July 1, a qualified Assistant; about 25. Apply personally, between 11 and 6, to Mr. Bourdas, at 46 Belgrave Road, London, S.W., or by letter.

CHEMIST'S and Druggist's unqualified Assistant required at once; high-class Store business. Apply, "Chemist," John Barnes & Co., Ltd., 191 to 217 Finchley Road, N.W.

HENRY WELTON, Chemist, Coventry, requires a qualified Assistant; outdoors; accustomed to Dispensing and Retail; also a Junior; about 21; indoors. Apply, giving usual particulars and enclose photo (to be returned).

IMEDIATELY, for a permanency, a thoroughly competent Manager (qualified); married preferred; good Prescriber and able to extract Teeth, with knowledge of Optics; first-class references indispensable; salary to commence at £120 and good percentage, with house, rates, and gas included. Apply personally, or if by letter enclosing carte, to Charles Cowles, 37 Broadway, Stratford, E.

JUNIOR Assistant or Improver wanted in a Light Retail and Dispensing business; comfortable home; half-holiday weekly. Apply, giving full particulars as to age, experience, salary, etc., to J. Shaw, 304 London Road, West Croydon, enclosing photo (if convenient). Applications not answered in 4 days to be considered declined.

JUNIOR Assistant. State age, height, salary (indoors), when disengaged, 52/36, Office of this Paper.

JUNIOR or Improver, not over 25, for good-class West-end Pharmacy; outdoors; no Sunday duty. State full particulars of experience, salary required, to 52/27, Office of this Paper.

LOCUM-ASSISTANT to take charge of good-class Retail and Dispensing business from June 30 to July 16 inclusive. State inclusive terms (indoors), with age and references of engagements and wholesale house, to "Hants" (52/25), Office of this Paper.

MESSRS. BARNARD & SON, 115a Stoke Newington Road, London, N., have a vacancy for an Assistant; indoors; salary £40 to £50, according to experience; hours 8.30 A.M. to 10 P.M.; two evenings from 6 P.M. or half-day off weekly; alternate Sunday duty evening only. Apply, stating experience, when disengaged, and giving names of references.

PHARMACEUTICAL SOCIETY OF IRELAND.

THE COUNCIL of this Society will, on the 1st day of July next, proceed to the appointment of an Examiner to conduct the Pharmaceutical and General Chemistry Division of the Pharmaceutical License Examination, subject to the approval of his Excellency the Lord Lieutenant and Privy Council of Ireland.

Full particulars will be supplied by the Registrar, with whom applications should be lodged not later than the 23rd inst.

ARTHUR T. FERRALL,
Registrar and Clerk to the Council.

67 Lower Mount Street, Dublin.
June 6, 1908.

QUALIFIED Assistant wanted for season or permanency, about 24, with good-class experience and some Photographic knowledge. Apply, stating full experience, age, height, salary required, and enclose photo, to Harrison, Pharmacist, Hindhead, Haslemere.

QUALIFIED Assistant, to manage a Branch at a shipping port in South Wales; must be active, capable, with a knowledge of Photographic trade; a junior is also kept; house attached for manager's occupation. State age, height, salary required, and references, enclosing carte, to "Chemicus" (53/31), Office of this Paper.

REGISTERED Assistant, about 28, wanted at once; outdoors; Light Retail and Photography. State references and salary to "Felix" (51/32), Office of this Paper.

WANTED, a qualified Assistant (indoors). Apply, stating all particulars, salary, etc., to Clare & Hunt, Scarborough.

WANTED, end of month, Chemist for country Branch; must be good Extractor and Dental Fitter; house free; salary and commission on Dental work; aged 30-40. Photo, references "Permanent," 6 Potter Street, Worksoop.

WANTED, for about three months, Junior Assistant (outdoors), principally for Photographic work, Developing and Printing. State full particulars of experience to D. T. Evans, The Parade, Margate.

WANTED, at once, a qualified Assistant for the Mixed trade in a working-class district, a cash trade of small amounts; outdoors; no Sunday duty; Thursday half-holiday. State age, if single or married, salary required, and references for the last three or four years, Watts, 596 Attercliffe Road, Sheffield.

WANTED, active Assistant; in or out doors; one who has had experience in calling upon small shopkeepers; good prospects for suitable man; no Sunday duty; half-holiday weekly. Apply, with full particulars in first letter, to T. H. Prichard, Cash Chemist, Abertillery, Mon. Applicants not answered in 4 days considered declined.

WANTED, a competent qualified Assistant (outdoors), chiefly for the Retail counter. Apply, giving full particulars, to D. P. Roberts, Chemist, 120 North End, Croydon.

WANTED, for a few weeks and possibly for a longer term, a duly qualified Dispenser. Write for further particulars, stating salary required (indoors), to the Medical Superintendent, Staffs County Asylum, Burntwood, near Lichfield.

WANTED, at once, a qualified Welsh-speaking indoor Assistant, with knowledge of Photography, to Manage a business in small watering-place in North Wales. Apply, stating salary and references, to 52/26, Office of this Paper.

WANTED, Junior Assistant in N.E. London; duties light; time for reading; good references required. Reply, stating salary, age, etc., to "H. K." (51/35), Office of this Paper.

WANTED, a man to manage a small business in a working-class neighbourhood; elderly man not objected to, but one seeking a permanency and who can furnish undeniable references. Apply to "Permanency," c/o Messrs. S. Maw, Son & Sons, 7-12 Aldersgate Street, E.C.

SANITARY Inspectors.—Lady Health Visitors.—Salaries £100 to £350; open to all; those desiring change should qualify for above appointments; Postal Course of Lessons now commencing for Exams. in London and the Provinces, Scotland, Ireland, and the Colonies; 450 successful candidates, and fully half had no previous Sanitary knowledge; fee 25s. Mushens, Sanitary Expert, Sunderland.

WHOLESALE.

EXPERIENCED Traveller wanted, immediately, to call on Retail Chemists (London and suburbs) offering a well-advertised and easily sold line of goods; applicants must be pushing and tactful; good commission and moderate salary, with increase if services justify. Reply, with references and fullest particulars, to 47/31, Office of this Paper.

INVOICE Clerk, with good knowledge of the Chemical trade and quick at figures; salary according to ability. Apply, "X." (219/60), Office of this Paper.

REPRESENTATIVES calling regularly upon Medical Men required in various districts of the United Kingdom to offer a genuine article already well introduced among the profession; liberal commission, large scope, and no competition. State age, experience, and fullest particulars, 51/16, Office of this Paper.

TRAVELLER (country) calling upon Chemists and Hairdressers on commission, to sell Bottles Perfumery, etc. State ground covered, 50/21, Office of this Paper.

TRAVELLERS, town and country, with good connection among Wholesale and Retail Grocers, Oilmen, Chemists, etc., wanted for "Gotim" fly-catchers. Send references and state ground covered to Audren & Co., 2 Bishopsgate Street Without, London, E.C.

WANTED, a trustworthy and experienced Assistant (qualified) for the Wet counter. Apply, with particulars of experience and salary required, to Lofthouse & Saltmer, Wholesale Druggists, Hull.

WANTED, by a leading house of Surgical-Instrument makers, a Representative to call on medical men in England; applicants must have a thorough knowledge of Surgical Instruments and Appliances and be of gentlemanly appearance and address. Applications, stating age, full qualifications, and experience (which will be treated confidentially), should be addressed in first instance to "Surgical" (219/56), Office of this Paper.

WANTED, energetic, reliable Travellers, with good connection with Chemists, to handle an exceptionally attractive Side-line; new and unique display and liberal bonus scheme makes selling easy; commission to commence, salary and commission after trial. State full particulars of ground covered, firms represented, etc. (in strictest confidence), 53/34, Office of this Paper.

FREE COPIES OF THIS SUPPLEMENT

are mailed every week to hundreds of inquirers, and delivered to them on Friday by the same post as "The Chemist and Druggist." They are thus enabled to reply very promptly to any advertisement which suits their needs. All that is necessary to secure the Supplement in this manner is to send a supply of stamped and addressed wrappers or envelopes to **The Publisher** of "The Chemist and Druggist," 42 Cannon Street, London, E.C., when a Supplement will be mailed every week for delivery in any part of the country, as stated above. Inquirers thus save the trouble of weekly application, and are sure of getting what they want, because "The Chemist and Druggist" Supplement is not only the approved medium for advertisements of this character, but has the largest circulation and gives the best results.

The Supplement may also be obtained on personal application at or after 9 a.m. on Friday Mornings at 42 CANNON STREET, LONDON, E.C.

SITUATIONS WANTED.

1s. for 12 words or less; 6d. for every 10 words beyond, prepaid.

EMBARRAS DE RICHESSE.

A London chemist (219-49), writing on June 9, states:—

With regard to my son's recent advertisement as Improver, I am glad to state that he received twenty replies, all from first-class chemists, engaging him straight off, and the only difficulty lay in avoiding offence to the other nineteen gentlemen who so kindly answered the advertisement.

RETAIL.

LOCUM; disengaged June 22. Bates, Chemist, 53 Lexden Road, Colchester.

SEASON or permanent; Junior; 20; 6 ft.; good references. 47/19, Office of this Paper.

LOCUM; lady; hospital experience; excellent testimonials. "M.," 1 Coleshill, Loughton, Essex.

SENIOR or Manager; qualified; aged 25; highest reference. Sharp, Clarendon Road, Croydon.

LOCUM; qualified; first-class experience; disengaged 15th. "Chemist," Foley House, Malvern.

LADY Dispenser; qualified; Locum or permanency. "Octo," 4 Beech Street, Swinton, Lancashire.

ASSISTANT or Manager; qualified; good Dispenser. Long, 3 Marshall Place, Hightown, Manchester.

DAY-LOCUM, except Saturdays; good experience; smart. "Extractor," 199 Scott-Ellis Gardens, N.W.

MANAGER, Branch; highest references; qualified; Extractor; at liberty. Strong, Crossgate Moor, Durham.

PHARMACEUTICAL Chemist; young; outdoors; abstainer; excellent references. Wills, Southcliffe, Falmouth.

ASSISTANT; unqualified; good experience; interview can be arranged. "Enterprise," 22 Dennett Road, Croydon.

DISPENSER; hospital or surgery; excellent references. "Nepenthe," 313 Wandsworth Bridge Road, Fulham, S.W.

UNQUALIFIED; Locum, Assistant, develop Branch; young; energetic. "Extractor," 54 Darnell Street, Newcastle-on-Tyne.

MANAGER or Locum; 33; married; Dental, Prescribing, Photo; experience exceptional. H. Scadjick, Camborne, Cornwall.

QUALIFIED; 23; outdoors; 7 years' experience; excellent references; Photography. Bell, Kingston House, Stockton-on-Tees.

PHARMACEUTICAL Chemist (Ireland) wishes post in England; experience leading houses Dublin and Belfast. 48/39, Office of this Paper.

LOCUM; qualified; excellent references; disengaged July 1 to 11 inclusive; whole or part. Caius, 21a Castletown Road, West Kensington.

MANAGERSHIP or berth view purchase; Cash Store trade, Prescribing, Extracting, Photography. "Chemist," Brunswick Villa, Huntingdon.

ASSISTANT; 25; unqualified; good Counter, Store, and Dispensing experience; London; good references. "G. A.," 58 Moscow Road, Bayswater, W.

JUNIOR; temporary or Locum; abstainer; 21; tall; excellent all-round experience and references; time for study. Evans, Corner Shop, Llanfair, Welshpool.

JUNIOR; 19; disengaged June 30; good Counter, Dispensing, and Photographic experience; good references; indoors or outdoors. R. O. Jones, Slate Works, Portmadoc.

ASSISTANT; 23; unqualified; good experience; Dispensing, Prescribing, Photographic, little Extracting, Counter. Apply, "R.," c/o Chapman, Stationer, Stamford.

UNQUALIFIED, married (29), requires permanency; town or country; Counter, Dispensing, Photo; highest references; disengaged. Hannath, 7 Eign Street, Hereford.

UNQUALIFIED; 29; disengaged; good Dispenser and Prescriber; well up in Photography and Optics; excellent references. "Statum," 136 Kennington Park Road, London, S.E.

IMPROVER; 18; 5 ft. 7 in.; disengaged July 6. Matthews, Innisvale, Totnes.

REQUIRED, post as Dispenser, Surgery Help, etc., to Medical man. Carroll, Stourport.

MANAGER, Locum, or Part-time; highest reference; disengaged. "P.," 15 Ingersoll Road, W.

DAY-LOCUM; Relief; days or half-days weekly. Thompson, 17 Ranelagh Grove, Belgravia.

LADY Dispenser to doctor; qualified; St. John certificates. "E.," 95 Capel Road, Forest Gate, E.

DISPENSER; part or whole time; good references; disengaged. "S. S.," 175 Kennington Road, S.E.

MANAGER, Locum; disengaged; 47; good experience; references. "Qualified," 6 New Road, Spalding.

ASSISTANT, experienced, as Manager, Locum, or Dispenser. "H. G.," 6 Willow Avenue, Barnes, S.W.

LOCUM; qualified; thoroughly reliable; aged 34; just sold business. Greatrex, 187 Leyton High Road, Stratford.

QUALIFIED, to relieve up to 28th inst.; good references; all-round experience. J., 47 Union Road, Clapham.

HOLIDAY Engagement.—"Qualified" offers services fortnight in August. "Chemist," 21 Clarence Street, York.

COMPETENT Assistant disengaged in few days; Extractor and Prescriber. "Squills," 99 Victoria Road, Peckham.

DISPENSER (Doctor's); unqualified; disengaged; excellent references. "Dispenser," 97 Ridley Road, Forest Gate.

LOCUM or Manager; aged 50; qualified; good references; disengaged. "W. P. S.," 131 Upland Road, East Dulwich.

DISENGAGED; Locum, Branch Manager, or Assistant; 40; qualified; married. Burton, 67b Queen's Road, Battersea, S.W.

ASSISTANT; unqualified; 30; town and country experience; Photography; outdoors; disengaged. 51/28, Office of this Paper.

ASSISTANT; unqualified; 10 years' experience; working-class preferred; disengaged June 30. Phelps, 5 Dulwich Road, Herne Hill.

MANAGER or Senior; qualified; good experience; Yorkshire W.R. preferred; liberty one month's notice. 52/15, Office of this Paper.

QUALIFIED as Locum, season's engagement, or Assistant; sea-side preferred; highest recommendation. 53/4, Office of this Paper.

BRANCH Manager or Assistant, town or country, married, qualified, reliable, seeks permanency. "Solace" (54/18), Office of this Paper.

COMPETENT Manager; qualified; good London experience; Photography; first-class references. Apply, "P. M. H.," 165 Fortress Road, N.W.

QUALIFIED; 9½ years' good-class all-round experience, town and country; well recommended. "Abstainer" (50/32), Office of this Paper.

LOCUM or permanency; middle-aged; qualified; energetic; abstainer; good Prescriber and references. Address, "A. W.," 82 Park Street, Camden Town, N.W.

SCOTCHMAN (25), qualified, first-class London experience, seeks situation in the East or on the Continent with good firm; start October. 51/29, Office of this Paper.

YOUNG Frenchman, tall (25), first-class French experience, energetic, offers his services for modest salary in English pharmacy. "J. J.," 10 Rue du Mont Thabor, Paris 1^{er}.

ASSISTANT or Dispenser, latter preferred; temporary, permanent or daily; varied experience; long reference; abstainer; disengaged. "Chemist," 290 Essex Road, Islington.

SENIOR or Branch; 30; tall; single; thoroughly competent; London and provincial experience; 4½ years present berth; disengaged. "Rhei," 285 Mile End Road, London.

DISPENSER'S Locum; two or three weeks in July or August; moderate terms for light duties; country or seaside; Minor and Hall qualifications. "Londoner" (50/11), Office of this Paper.

LOCUM; qualified; moderate terms. "Forceps," 13 Melton Street, Euston.

ONE or two evenings weekly; qualified; 25. Kydd, 36 Dartmouth Park Road, N.W.

AS Dispenser; 44; surgeon or hospital; good experience. 54/51, Office of this Paper.

LOCUM; June 13 to July 4, or any portion; good references. L 274 Earlsfield Road, S.W.

QUALIFIED Chemist (28), unmarried, 13 years' experience, desires position as Dispenser to doctor or part-time to Chemist. 45/40, Office of this Paper.

MANAGER, Locum, or Assistant; qualified; exceptionally good all-round experience; reliable and trustworthy; disengaged. "Pharmacist," 87 Hayter Road, Brixton, S.W.

ASSISTANT; 26; thoroughly experienced, London and provinces; good Dispenser and Prescriber. Richardson, 179 Goldhawk Road, London, W.

PERMANENCY or Locum; real live Chemists; qualified; aged 32; many important appointments carried out; up-to-date ideas successfully worked. "R.," Fairview, Talfourd Road, Peckham, S.E.

SITUATION required; Stockkeeper, Counterhand; excellent references; disengaged; Wholesale or Retail; tall; married; aged 30; country preferred. Mereury, 12 Princes Square, Kennington Park Road.

LADY; married; 30; unqualified; Retail or Stock. "Euthymol," 13 Melton Street, Euston.

DISPENSER, married, requires engagement; many years' experience; passed examinations except part Final for diploma of Apothecaries' Hall; recent references. "G. P.," 6 Warrington Road, Ipswich.

MANAGER of Branch, Locum; West-end and country experience; Prescriber; steady, reliable, energetic, trustworthy; well recommended; aged 45; disengaged June 25. "Statim," e/o Clarke, Chemist, Surbiton.

LOCUM or competent Assistant; used management; up-to-date experience; reliable Dispenser; permanency desired; outdoors; good references; disengaged. "B.," 7 Broomcroft Villas, Antrobus Road, Acton Green, Chiswick.

QUALIFIED; 24; good Dispensing experience; outdoors; disengaged. Johnson, 38 Traffic Street, Derby.

PERMANENCY or Locum; outdoors; London; experienced. "Qualified," 13 Trafalgar Square, Chelsea.

FRENCH Chemist (27), speaking Italian and English, West-end experience, good references, small salary, desires situation. Chiantel, 109 Grosvenor Road, London, N.

ITALIAN qualified Chemist (26), speaking English, French fluently, London (West-end) experience, seeks position abroad; best references. Cairoli, 56 Berners Street, Oxford Street, W.

WHOLESALE.

AS Traveller; wholesale and Retail connection; salary and commission. "G.," 13 Ingersoll Road, W.

TRAVELLER, with connection London and suburbs, wishes to Represent good house. Hoskins, 12 Florence Road, Wimbledon.

REPRESENTATIVE, steady, energetic, well up, wishes for engagement with good house. "A. B.," 29 Winchester Road, Hampstead, London.

FLY-CATCHERS.—Orders waiting for manufacturers of; supply samples. State commission, W. D. Calvert, 57 Southfield Road, Bedford Park, W.

GENTLEMAN desires to meet with first-class House having good Speciality or Proprietary to introduce to Doctors. "Northern" (52/202), Office of this Paper.

TRAVELLER, with large connection among Chemists and Medical men in London and Home Counties, desires re-engagement. "G. L.," (54/16), Office of this Paper.

TRAVELLER, young, energetic, desires re-engagement with good house; Drugs, Sundries, Instruments; excellent references. "Potassium" (52/22), Office of this Paper.

LADY desires appointment; accustomed to supervision and controlling hands, packing Drugs, Sundries, Toilet Articles, and Specialities for Wholesale and Export. 50/8, Office of this Paper.

SCOTLAND.—Good House, desirous of opening ground or increasing their business, should communicate with advertiser, who is contemplating making a change; has a really first-class connection among the best Chemists; shall be pleased to furnish fullest particulars *re* turnover, etc. Address, 49/22, Office of this Paper.

MISCELLANEOUS.

MCADAM & TUCKNISS, Sharedealers, 30 Tranquil Vale, Blackheath, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject).—164 Camwal Ordinary, 3s. 3d.; 214 Preference, 10s. 9d.; 200 G. B. Kent Preference, 19s. 4½d.; 40 Lewis & Burrows Ordinary, 4s. 7½d.; 28 Meggeson Ordinary, 19s. 4½d.; 200 A. J. White Ordinary, 3s. 7½d. e.d.; 150 Preference, 12s. 1½d.; 200 Ilford Preference, 13s. 3d.; 100 Benger's Ordinary, 26s. 8d.

WANTED (subject).—20 Evans Lescher Preference, £5 6s. 9d.; 5 Camwal Debentures, £35.

List of shares for sale and wanted sent free on application. Bankers: London and County. Established 1898.

THERE IS A GREAT NEED

—and a constantly growing need—for the services of **SKILLED SIGHT-TESTERS**. Sight-testing thoroughly taught by post by Practising Qualified Optician. Everything taught that will enable you to remedy defective vision. Particulars from

J. E. Bamister, Practising Optician, **BLOXWICH**.

SPLENDID VALUE (Second-hand).—Handsome 13-ft. wall-fixture, comprising range of drawers with gold labels and knobs, lockers, shelving, with two mirror cupboard and cornice, £11; 6-ft. dispensing-screen, mirror centre, £4 10s.; perfume case and desk, 45s.; 3-ft. plate-glass counter-case, 55s.; 144 gold-labelled shop-rounds, £5 15s.; 11 dozen recess-labelled ditto, £9 10s.; bent-front counter-case, 4 ft. 6 in. long, 75s.; 12 4-lb. pink jars, 40s.; 12 4-lb. blue ditto, recess labels, 42s.; set of 3 plate-glass shelves, 4 ft. long, with tapped bars and brackets, 42s. **R. TOMLINSON & SONS, BOND STREET, BIRMINGHAM.**

SECOND-HAND CHEMIST'S FITTINGS.—We have an exceptionally fine selection of these in all sizes; prices are right and goods are in first-class condition; we shall be pleased to supply particulars and prices. Call or write, **RUDDUCK & CO., 262 OLD STREET, LONDON, E.C.**

SECOND-HAND SHOP-FITTINGS.—10-ft. drug-fitting, with lockers and mahogany fronted drawers, glass labels and knobs, mahogany coverboard and cornice, and mahogany-fronted pilasters and shelves; 8-ft. mahogany and plate-glass fronted serving-counter; 4-ft. mahogany and plate-glass counter-case; perfume case and desk; 4-ft. mahogany screen, with plate-glass bevelled mirror centre and cases each side; counter under same with plate-glass cases in front; 4-ft. wall-case, opening in front with three glass doors, and fitted inside with shelves; nest of 10 drawers for behind counter; ready or immediate despatch; price, complete, £39 10s. **PHILIP JOSEPHS & SONS, 93 Old Street, London, E.C.**

CHEMISTS' SHOP-FITTINGS (SECOND-HAND).—Ranges mahogany drawers, with bevelled-edge glass labels and cut-glass knobs, shelving above, lockers below; mahogany dispensing-screens, counters with glass-case fronts, wall-cases, bent-front and flat-top counter-cases, counter-desks, tooth-brush cases, complete shop-rounds, etc.; every requisite for chemists; extensive stock to select from at extremely low prices; practical men sent to all parts; illustrated catalogues and estimates free. **MATTHEWS, CHEMISTS' FITTER, 14 and 16 MANCHESTER STREET, LIVERPOOL.**

MACHINERY OIL.

We mentioned this subject last week, and we repeat it simply because we specialise in this oil, the value of which has never been equalled by any oil offered you. Please write for a sample, and we will abide by your decision.

THE COUNTY CHEMICAL CO., Ltd., Manufacturing Chemists and Oil Refiners, Excelsior Works, **BIRMINGHAM.**

TO CHEMICAL MANUFACTURERS.—For Sale, large quantity second-hand plant, including Tanks, Mixers, Filter Press, Acid Pump, Drying Cylinder, Boiling-pans, Weighbridge, Boilers, Engines, Shafting Pulleys, Strapping, Floor-plates, Platforms, etc.; also large quantity Chemicals and Laboratory Utensils; ready for delivery. **John Stringer & Son, Blackburn.**

ARTIFICIAL TEETH.—Painless Extractions. — You get best results with T. Barton, the Chemists' Mechanic, doing your work; your interests are mine, and I watch and advise on your impressions and bites; can refer you to numerous delighted Chemists. Note address, 194 Mansfield Road, Nottingham. Tuition in all branches.

CHEMISTS wanted, of good standing and high local reputation, to Represent Farrow's Bank, Ltd. (The People's Bank) in their respective towns; salary or commission payable, or both; preference given to tradesmen residing in those counties where the bank's numerous branches are situated; premises fitted up and outfit by bank. Applications should be addressed to the Managing Director, Mr. Thomas Farrow, 1 Cheapside, London, E.C.

MY BEST TESTIMONIAL

is the continuation on my register of the smartest chemists in the country —as they pay renewal fees year by year presumably it pays them to do so—and will pay you to write for my *free booklet* and references as to my abilities as a Profit Maker and Business Increaser.

Bernard Slack, The Original Business Increaser, 67 Carter's Grn., **W. Bromwich**

Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Wednesday, June 17.

Thames Valley Chemists' Association. Launch trip in connection with the Western (of London) and Guildford Association. All the tickets allotted to the Association have been disposed of, and holders are asked to note that the boat will leave Kingston at 2 o'clock prompt, and to endeavour to be on board at least ten minutes before the boat is due to start, to save delay.

Edinburgh Chemists' Trade Association and Glasgow and West of Scotland Chemists' Association. Joint excursion to Rumbling Bridge and Falls of Devon. Train leaves Edinburgh (Waverley) at 9.10, and the same time from Glasgow (Queen Street), the parties joining at Alloa. Particulars of the arrangements and price of tickets were given in the *C. & D.*, May 30, p. 822. Local chemists can join the excursion *en route* if desired.

Royal Microscopical Society, 20 Hanover Square, London, W., at 8 p.m. Mr. E. Heron-Allen and Mr. A. Earland, "On Cycloleculina: A New Generic Type of the Foraminifera"; Mr. J. W. Gordon, "Illuminating Apparatus for the Microscope" (Mr. Gordon and Mr. H. Fletcher Moulton will exhibit a new lens for high-power microscopy exhibition); Micro-slides of the development of the chick, by Mr. A. Flatters, F.R.M.S.

Plymouth, Devonport, and Stonchouse Chemists' Association. Excursion to Lukesland. Train leaves Millbay Station at 2.25 p.m. for Ivybridge. Tickets (4s. gentlemen, 3s. 6d. ladies) from Mr. F. A. Spear, 68 Old Street, Plymouth.

Thursday, June 18.

Chemical Society, Burlington House, Piccadilly, London, W., at 8.30 p.m. The following papers will be communicated: "The Thermal Decomposition of Hydrocarbons," Part I. (methane, ethane, ethylene, and acetylene), by Dr. W. A. Bone and Mr. H. F. Coward; "The Rusting of Iron," by Dr. W. A. Tilden; "Studies on Elementary Zirconium," by Messrs. E. Wedekind and S. J. Lewis; "The Constituents of Canadian Hemp," Part I. (apocynin), and "A New Synthesis of Apocynin," by Mr. H. Finemore; "The Constitution of the Diazonium Perbromides," by Dr. F. D. Chattaway; "Cholestenone," by Messrs. C. Dorée and J. A. Gardner; "A New Form of Potash Bulb," by Mr. A. E. Hill; "Solubility of Silver Chloride in Mercuric Nitrate Solutions," by Mr. B. H. Buttle and Dr. J. T. Hewitt.

West Ham Chemists' Association. Annual outing. Rendezvous, Crown Hotel, Laindon Hills. Particulars from Mr. J. E. Evans, Hon. Secretary, 69 Leytonstone Road, London, E.

Brighton Association of Pharmacy, A.B.C. Rooms, 58 King's Road, at 9 p.m. Buying Club report and discussion on the Poisons and Pharmacy Bill, and summer excursion.

Saturday, June 20.

St. Vincent Association. River trip from Henley to Windsor. The programme is as follows: Leave Paddington Station at 8.48 and embark on the steam launch *His Majesty* at Henley. Lunch will be served at the Crown Hotel, Marlow, and afternoon tea on board. The party will dine at the White Hart Hotel, Windsor, at six o'clock, and leave by the 8.18 for Paddington. Tickets (15s. each) can be obtained on application to Mr. J. R. Bailey, Hon. Secretary, 13 Devonshire Square, London, E.C.

THE DISTRIBUTION OF PRIZES to the students of the School of Pharmacy of the Pharmaceutical Society of Great Britain will take place on June 24 at 3 p.m.

THE COMBINED EXCURSION of the Midland Pharmaceutical Association, the North Staffordshire Chemists' Association, and the Wolverhampton Chemists' Association will take place on June 25 to the Wrekin. Particulars can be obtained from the Hon. Secretaries of the Associations. The Birmingham party is to leave Snow Hill Station at 1.55, and the tickets (5s. 6d. each) can be had from Mr. J. A. Radford, 14 Union Street.

EARLY CLOSING.—More activity than usual has been experienced this winter in the adoption of early closing agreements throughout the country. In Waterville, Maine; Fort Dodge, Iowa; and Topeka, Kansas, the druggists have agreed to close their stores all day on Sundays. The same action has doubtless been taken in other cities. In many places, too, the druggists have decided to close an hour or two earlier in the evening than usual, 8 p.m. being the time which is generally established as the ideal hour.

College Notes.

GLASGOW SCHOOL OF PHARMACY.—The annual visit of the students to the St. Rollox Chemical Works of the United Alkali Co., Ltd., took place on June 3. The manufacture of soda crystals and sulphuric acid was practically demonstrated by the chemist of the works. The recovery of the hydrochloric acid and the intermediate production of salt cake was also shown. Among the improvements recently adopted is increased supply of sulphur dioxide and air to the chamber, created by an electrically-driven exhaust fan. The pyrites burners have been fitted with extra doors on account of the quicker combustion of the pyrites, and instead of the usual steam supply water is injected into the chambers from above in the form of a fine spray, which is rapidly vaporised by the heat of the chambers. The rate of acid formation is by these means increased considerably.

WHERE TO STUDY.

THE following educational institutions are advertising in this issue:

South London School (Muter's), 325 Kennington Road, London, S.E.
London College of Chemistry, 323 Clapham Road, London, S.W.
South of England School, 186 Clapham Road, London, S.W.
Brixton School, 78 Stockwell Park Road, London, S.W.
Manchester College of Pharmacy, 223A to 227A Oxford Road, Manchester.
Northern College of Pharmacy, 100 and 102 Burlington Street, Manchester.

EVERY BOOK A BUSINESS HELP.

THAT is one of the virtues of the *C. & D.* series of practical and useful money-making and money-saving books. The old editions are old friends; but the new editions bring new business, because they contain new ideas. They are:

"**PHARMACEUTICAL FORMULAS.**"—Seventh edition ready shortly. Bigger and better than before, but the same price, 10s.; by post, 10s. 6d.

"**VETERINARY ACCOUNT PRACTICE.**"—Fifth edition, ready in a few weeks. A M.R.C.V.S. has revised and added to this increasingly valuable book. Price 4s.; by post, 4s. 4d.

"**THE ART OF DISPENSING.**"—Eighth edition now ready. Pp. 542. Price 6s.; by post, 6s. 4d. "Outstrips its predecessors in diversity of contents; thoroughly up to date" (Mr. Harold Wyatt).

"**THE CHEMIST OPTICIAN**" will be in the binders' hands soon. This book is a survey of the theory and practice of visual optics, especially with reference to sight-testing and spectacle-fitting. It gives exact details of how to carry on this lucrative side-line. Price 4s.; by post, 4s. 3d.

These and other *C. & D.* books can be obtained from the firms below. They are published at the *C. & D.* head offices, 42 Cannon Street, London, E.C.

Ayrton, Saunders & Kemp, Ltd., Liverpool.
Barclay & Sons, Ltd., London.
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W. & R. Hatrick & Co., Glasgow.
Hirst, Brooke & Hirst, Ltd., Leeds.
W. & R. Holmes, Glasgow.
R. Hovenden & Sons, Ltd., London.
John Ismay & Sons, Newcastle-on-Tyne.
H. K. Lewis, 136 Gower Street, London.
Lynch & Co., Ltd., London.
S. Maw, Son & Sons, London.
May, Roberts & Co., London.
F. Newbery & Sons, Ltd., London.
W. Paterson & Sons, Aberdeen.
Pinkerton, Gibson & Co., Edinburgh.
Potter & Clarke, Ltd., London.
Raimes, Clark & Co., Ltd., Edinburgh.
Raimes & Co., York.
Sangers, London.
Southall Bros. & Barclay, Ltd., Birmingham.
W. Sutton & Co., London.
John Thompson, Ltd., Liverpool.
James Woolley, Sons & Co., Ltd., Manchester.
Wilkinson & Simpson, Ltd., Newcastle-on-Tyne.

Minor Experiences.

London.

My first subject was dispensing, and the following was the prescription:

Morph. mur.	...	...	...	...	gr. $\frac{1}{2}$
Ext. bellad.	...	...	...	...	gr. $\frac{1}{2}$
Ol. theobrom.	...	...	...	...	q.s.
Ft. supp.	Mitte vj.	ut dictu	utend.		
Ferri et am. cit.	...	...	...	...	ʒij.
Gum. myrrhæ	...	...	...	...	ʒij.
Ft. pil. xx.	Silver.				
Ung. chrysarobini 10 per cent.					
Mitte ʒj.	To be applied as directed.				
Pot. chlor.	...	...	...	...	ʒij.
Tr. ferri perchlor.	...	...	...	...	ʒij.
Glycerini	...	...	...	...	ʒss
Aq. ad	...	...	...	...	ʒvj.
Ft. mist.	$\frac{1}{2}$ t.d.s. p.c.				
Mist. ferri co.	...	...	...	...	ʒx.
ʒss.	t.d.s.				

Having pointed out the two overdoses, I began work on the suppositories. I made for eight, pouring out six very comfortably. No examiner can object seriously to the weighing-out of quantities sufficient for eight. The candidate is frequently requested, however, to show the residue. Another point in this connection is the ext. bellad. I made inquiries whether I was to use the green or the alcoholic extract, and was told to employ the former. I then proceeded with the ointment, and then with the pills. I took the precaution to use the lump myrrh, massing by the aid of a few drops of spirit and water, varnishing, and silvering. The next step was the chlorate mixture, and finally mist. ferri co. In the afternoon I was marched off to practical chemistry, beginning on qualitative work. I append the substance of this paper: (1) Examine qualitatively the given mixture of two substances; (2) state to what extent the given sample of liquor arsenicalis P.B. will comply with the official requirement of 1 gram of arsenious oxide in 100 c.c.

A week afterwards I was again at Galen Place, and chemistry was the first subject. I was required to write out all the oxides of sulphur and of phosphorus, their methods of preparation and their action on water. Write several more acid anhydrides. The examiner was satisfied with CO₂, As₂O₃, and CrO₃. What is borax? Formula? Effect of its solution on litmus? Its tests? What causes the green-tinged flame in the alcohol ignition test? Effect of heat on boric acid? How make borax from boric acid? How make a sample of boric acid given borax? Impurities in sulphuric acid? How these existed? Tests? Tests for arsenic and lead? I gave the arsenic test which is described in the B.P. under glycerin, and I named the compound formed on the mercuric-chloride paper—viz., AsH(HgCl)₂—as stated in the Pharmacopœia. Also Marsh's test, and how conducted? The name of the compound formed by dissolving the element arsenium obtained in this process in hypochlorite of soda solution? Then tests for arsenites. Phosphorus anhydride—why so called? Formula P₂O₅ or P₄O₁₀, and how was this decided? Vapour density, and how to obtain? I named Dumas', Hofmann's, and Victor Meyer's methods, and finally described the last. Connection between vapour density and molecular weight? A mental calculation respecting pressure indicated by so many millimetres of water standing in a tube. What is acetanilide, and how made? Formula? What is it like? What is chloral? Formula? How is oxalic acid made commercially? This over, I was presently directed to prescription-reading. The examiner gave me first three fairly straightforward prescriptions to read into English, one to write out in full Latin, about a dozen or so of the more uncommon doses, and finally the following calculation: "How much of a solution of liq. hydrarg. perchlor., 1 in 20, must be used to make 1 pint of a 1 in 1,500 solution?" In materia medica I was shown *Barosma betulina* and *B. serratifolia*, with several adulterations; bearberry-leaves, matico, eucalyptus (percentage of eucalyptol contained in the oil), digitalis-leaves: Order, habitat, constituents and their nature? What are glucosides? What is meant by hydrolysis? Flag rhizome (a few questions on the manner of growth of this rhizome). Coca-leaves, constituents and percentage? How alkaloids existed in plants? In what form do strychnine and brucine occur? A general method of extracting alkaloids? Finally, *Triticum repens*. My next subject was botany. I had to identify *Datura Stramonium*. Order? Nature of fruit? Characters of *Solanaceæ*, and the types of fruits to be found in this order? *Helleborus niger*: Order? Why? Name other plants of this order bearing petaloid calyces. (I gave *Caltha palustris* and *Clematis*.) Name other orders with indefinite stamens? How

to distinguish *Rosaceæ* and *Ranunculaceæ*? *Selaginella*: "What is that?" A portion of a member of the *Filicinae*—the sporophyll. "What are these?" The sori. "Yes; give the life-history." "What is a prothallus like—its shape?" "What is this?" A species of *Ruscus*. Order? Cladodes—structure of, etc.? Other plants bearing cladodes? The phyllodes of *Acacia*? Two sections under the microscope—(1) T.S. dicotyledonous stem, (2) T.S. stem of water-plant. Next, the histological difference in roots and stems. Appearance of T.S. of monocotyledonous stem, and how it differs from stem of dicotyledon? Rhizome of Solomon's seal: Purpose of rhizomes? What were the scars on the older portions? Was any of this plant above ground during the winter? Other types serving for vegetative reproduction—viz., corms, bulbs, tubers of *Orchis*, *Ipomœa purga* tubercles. What is chlorophyll? Where does it occur? Is it ever to be found in the epidermis? Its purpose? What is a carbohydrate? How does the plant build up carbonaceous food? In pharmacy I was given spt. ammon. aromat. in an unlabelled bottle. How is this spirit manufactured? Of what did the second portion of the distillate consist? How is the solution of the ammon. carb. effected? How is liquor calcis made and preserved? How is it determined when the slaked lime had been washed free of chlorides? How is slaked lime made? How is pulv. glycyrrhizæ co. made? In case the constituents are not exactly of the same degree of disintegration, what methods would ensure thorough mixing, apart from the usual sifting? The kind of liquorice-root used? How to make ung. belladon., and the extent to which the liquid extract is to be evaporated? Strength? How to make ung. veratrin., and strength? Strengths of ung. atropinæ, ung. cocaine, liquor trinitrini, and extract. belladon. liq.? The conditions of sale of chloroform and Easton's syrup?

(35/59.)

At the Counter.



MRS. B.: "Give me wan o' thim cynical thermometers, an' fix it at nointy-eight—that's th' eat the doctor said moi owld man should be kipt at!"

ELIXIR PROPRIETATIS in our midst, writes a Birmingham chemist, is known as elixir of potatoes, but when it is called perspiatates, and so asked for, it is a little clouded.

"A PENNYWORTH of corn plasters, please," said the little girl. "Small size?" the chemist inquired. "No, sir; father said I had to mention 'The Pilgrim's Progress' if you asked."

GEORGE BORROW vigorously combated what he termed "Scotch gentility." It alarms one to imagine his anger if he had heard a bilious Scot remark gravely that he was suffering from "the boil"; and the reception of a note requesting a supply of "bacon soda" would assuredly have developed apoplexy.

Exchange Column—Bargains.

TERMS.

One halfpenny per word with name and address. One penny per word if we register the address and attach a number.
No Advertisement inserted for less than 6d.

TO BUYERS AND SELLERS.

We take every care to ensure that proprietary and other goods advertised in this column are genuine surplus stock of reputable persons in business, and are compelled to refuse advertisements sent by those who, when occasion requires, decline to satisfy reasonable inquiries as to their *bona-fides*.

We again call the attention of those who use this column for the sale or purchase of goods to the desirability of using our Deposit System. Some forward goods before they receive money for them, and others forward money to advertisers before they have even seen the goods. Disappointment in such circumstances is bound to happen now and then, and it is to prevent this, as well as to check fraud, that our Deposit System was instituted.

The buyer sends us the money for the goods, and when we hear from him that they are satisfactory, and not till then, we hand over the money to the seller. A commission of 6d. is charged by us on any transaction of 3l. or less, and 1s. if above that amount. The commission is payable by the buyer, and should be included in the money sent to us. All Cheques and Postal Orders should be made payable to "Edward Halse," and crossed "Martin's Bank, Ltd."

FOR DISPOSAL.

BOOKS AND PERIODICALS.

"MODERN PHYSICIAN," including veterinary portion; new; what offers? *PUGH*, 189 Wavertree Road, Liverpool.
TAYLOR and Baxter's "Sight Testing," Nettleship's "Eye Diseases," Thorington's "Refraction," Thorington's "Schematic Eye," "Art of Dispensing"; offer or part exchange for "Codex."
"CHEMIST," 109 Fentiman Road, S.W.

DRUGS AND CHEMICALS.

EUCALYPTUS B.P., 3 28-lb. tins for sale, 1s. per lb. LIVERPOOL
BORAX Co., LTD., Old Swan, Liverpool.
OTTO DE ROSE, finest selected quality; imported by Bush Co.; 2-oz. avoird.; best offer. SIGGS, c/o Wilson, Chemist, Stowmarket.

FORMULÆ.

AN invaluable embrocation formula for rheumatism, lumbago, neuralgia, etc.; very easily made and ready for use; it dries in the skin without rubbing, and in no way stains clothes; this formula with a capital would make a large fortune. 54/14, Office of this Paper.

OPTICAL AND PHOTOGRAPHIC.

"OPTICAL LECTURES," a complete £2 2s. MS. set for 10s. P.O. 51/31, Office of this Paper.
PORTRAIT lens, studio, folding camera, rectilinear lens; bargains. HICKMAN, Abbotts Road, Southall.
OPTICAL.—42s. Selfe's astigmeter for 30s.; 17s. 6d. faciometer, 10s.; both equal to new. NEWBIGIN, Alnwick.

CAMERA, 7½ by 5, 6 slides, whole plate, Morley's rectilinear lens, tripod, 4 doz. plates; £2 5s. lot. HICKMAN, 5 Abbotts Road, Southall.

A BARGAIN.—Best quality and condition, 3,000 cream-enamel G.B.E. cabinet mounts, 11s. per 1,000 or 30s. the lot, carriage paid. HELSBY, Chemist, Grimsby.

PROPRIETARY ARTICLES.

WHAT offers 2¼ gross 1s. Ozonia? no reasonable offer refused. MANN, St. George's Road, Bristol.

OVERSTOCKED.—3 doz. 1s. 6d. anturic bath salts, 12s. 6d. per doz.; 1 doz. 1s. 1½d. bromo phosph., 10s. per doz.; 2 doz. 7½d. Dodge's creosote, 4s. per doz.; 1 doz. 1s. 1½d. Dodge's creosote, 7s. per doz.; 4 doz. 1s. 1½d. Lineol liniment, 8s. per doz.; 6 doz. 1s. 1½d. Vitadatio, 8s. per doz.; 3 doz. 1s. 1½d. Cockles' pills, 8s. per doz. J. & J. THOMPSON & Co., LTD., 192 Manchester Street, Oldham.

SHARES.

SHARES for sale. See p. 65.

SHOP FITTINGS.

THREE 2-gall. swan-neck earboys, with cut-glass stoppers, on mahogany stands, as Maw's list, No. 1450, page 171; 20s. each. Apply, J. J. (220/74), Office of this Paper.

MISCELLANEOUS.

CARBOY, 6 to 8 gall., 9s. 6d.; Byron starch gloss, 3s. 6d. doz. 53/1, Office of this Paper.
DENTAL chair, upholstered in maroon plush, rising seat; £3. "E. J. S." 25 Leinster Square, Bayswater.
LARGE handsome inlaid solid mahogany disc talking-machine, with 24 2s., 12 3s., 12 3s. 6d., 6 4s. records; cash £8 10s.; will accept clean patents value £11. REED, Chemist, 215 Leytonstone Road, E.
TWO 15-grain tubes chloro-platinate potassium, 4s. 6d.; 3 doz. 7½d. Keene's corn-cure, 15s.; 5,000 6-sheet C.D.V. and cabinet mounts, real gold bevel, 40 per cent. off Houghton's list; all carriage paid. "CHEMIST," 141 St. James's Street, Burnley.
25 FORCEPS, quite new, various patterns. 3s. 6d. per pair; gun-metal vulcaniser, in perfect condition, 30s.; dental engine, with No. 7 handpiece, £2 10s.; and 1,000 diatoric upper and lower fronts, 20s. "P.," Ribblesdale House, Thrale Road, Streatham, S.W.

WANTED.

"ART OF PHARMACY," Bennett's "Pharmaceutical Latin," etc. JOHNSON, 109 Empire Road, Sheffield.
SHOP-ROUNDS, counter, fittings, for shop 11 ft. square; cheap. "ALDEHYDE" (220/61), Office of this Paper.
PLATINUM, iridium, platinum-chloride reduced; prompt remittance. ROWSELL, 11 Crebor Street, Dulwich.
NITROUS oxide gas apparatus, with cylinders; also dental chair. State lowest price, TOTTLE, Chemist, Liscard, Cheshire.
MINOR, Major, Chemists' books.—Send prepaid for valuation; cash offers per return. GOWER, Bookseller, Waterfloo, Liverpool.
SHOP-ROUNDS and fittings for small branch. State particulars and lowest price, HUNTER, Maughan Street, Benwell, Newcastle.

ADDRESSES WANTED.

THE present address of Mr. David Misell, agent, late of 14 America Square. 48/31, Office of this Paper.